



Commandant
United States Coast Guard

2100 Second Street SW
Washington DC 20593-0001
Staff Symbol: (G-CPA)
Phone: (202) 267-2929

COMDTNOTE 5312
27 NOV 2000

COMMANDANT NOTICE 5312

CANCELLED: 26 NOV 00

Subj: CH-1 TO STAFFING STANDARDS MANUAL, COMDTINST M5312.11A

1. PURPOSE. This Notice publishes changes to various chapters of the Coast Guard Staffing Standards Manual. The Manual provides for the planning and allocation of civilian and military personnel resources for the Coast Guard.
2. ACTION. Area and district commanders, commanders of maintenance and logistics commands, commanding officers of headquarters units, assistant commandants for directorates, Chief Counsel, and special staff offices at Headquarters shall use these standards to develop billet structures for planning proposals.
3. SUMMARY. The staffing standards provided herein are established for planning purposes. The have been developed from an analysis of the functions and workload of the classes of units involved using historical and engineered data and technical estimates. These standards form the basis for establishing and validating the personnel requirements for the classes of units discussed. They are a management tool used to justify resources for planning proposals and other workforce requests. This Manual incorporates several significant changes which are listed below:
 - a. Chapter 1 has been revised and the data revalidated and/or updated. Chapter 1 updates staffing guidance, staffing management responsibilities, and manpower designation criteria.
 - b. Chapter 2, Section F, Air Stations, has been revised and the data revalidated and/or updated.

DISTRIBUTION – SDL No. 139

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
A																										
B		8	20		12			1			1	1	1	1	1		1	1	1		1					
C	1	1																								
D	1																									
E																										
F																										
G																										
H																										

NON-STANDARD DISTRIBUTION: B:c LANTAREA (Ar), PACAREA (Pr) (6 extra)

4. REVISION. Staffing Standards should be reviewed regularly to determine their validity especially when new technology or a change in mission affects the staffing of the activity, facility, or rating.
5. PROCEDURES. The staffing standards contained herein will be cited as partial justification when requesting changes in billets through normal planning, programming, and budgeting processes. The following pages are to be removed and replaced as follows:

Remove

Table of Contents
Chapter 1, Pages 1-31
Section 2-F, Pages 43 through 66

Insert

Table of Contents
Chapter 1, Pages 1 through 53
Section 2-F, Pages 43 through 66

/s/T.W. JOSIAH
Chief of Staff

TABLE OF CONTENTS

CHAPTER 1 Policy & Procedures

SECTION A -- Introduction	1-1
SECTION B -- Staffing Criteria	1-2
SECTION C -- Work Activities	1-27
SECTION D -- Availability Time	1-28
SECTION E -- Staffing Standards Development	1-41
SECTION F -- Mobilization Staffing Policy	1-45
SECTION G -- Glossary	1-50

CHAPTER 2 Staffing Standards for Operational Activities

SECTION A -- Aids to Navigation Facilities	2-1
SECTION B -- Aids to Navigation Teams	2-2
SECTION C -- Loran Stations	2-31
SECTION D -- OMEGA Stations	2-38
SECTION E -- Cutters	2-39
SECTION F -- Air Stations	2-43
SECTION G -- Stations	2-66
SECTION H -- Coastal SAR Facilities	2-86
SECTION I -- Marine Port Safety	2-87
SECTION J -- Strike Teams	2-88
SECTION K -- Radio/Communications Stations	2-89
SECTION L -- VTS	2-90

CHAPTER 3 Staffing Standards for Support Activities

SECTION A -- Area Offices	3-1
SECTION B-- Maintenance and Logistics Commands	3-2
SECTION C-- District Offices	3-3
SECTION D-- Group Offices	3-4

CHAPTER 4 Staffing Standards for Support Facilities

SECTION A-- Electronics Shops	4-1
SECTION B-- Electronic – Telephone Shops	4-18
SECTION C-- Support Centers	4-33
SECTION D-- Supply Centers	4-34
SECTION E-- Bases/Depots	4-35
SECTION F-- Personnel Reporting Units	4-36
SECTION G-- Dining Facilities – Subsistence Specialist	4-37
SECTION H-- Dining Facilities – Mess Attendants	4-40
SECTION I-- Housing Support and Maintenance	4-43
SECTION J-- Facility Engineering/Public Works	4-49
SECTION K-- Fire Fighters	4-50
SECTION L-- Medical Facilities	4-54
SECTION M-- Logistics Activities	4-55
SECTION N-- Installation Security	4-57
SECTION O-- Information Resource Management	4-66

CHAPTER 5 Staffing Standards for Headquarters Units

SECTION A -- Training Centers	5-1
SECTION B -- Recruiting Centers	5-2
SECTION C -- Ship Training Detachments	5-3
SECTION D -- Reserve Station Keepers	5-4

CHAPTER 1. Staffing Standards Guidance

A. Introduction

1. **Definition.** A Staffing Standard defines the quantitative and qualitative manpower required to accomplish identified workloads for a class of units, unit or activities. A staffing standard identifies the skill levels, series, rating and paygrades needed to perform Coast Guard work activity.
2. **Philosophy.**
 - a. Coast Guard staffing guidance is based on the premise that the Coast Guard is the principal Federal Maritime law enforcement agency, a military service, and one of the Nation's five Armed Forces. The Coast Guard must maintain a constant state of readiness to function as a specialized, non-redundant part of the Navy in time of war or national emergency. The Coast Guard's staffing guidance is therefore consistent with Department of Defense and United States Navy policies.
 - b. The Staffing Standards Manual was developed to assist Headquarters Program Managers and field commanders to define manpower requirements needed to accomplish Coast Guard missions. Staffing standards are primarily concerned with "nature of work" considerations. Staffing Standards by themselves are not sufficient to evaluate the Coast Guard personnel system, nor are Staffing Standards the final authority in personnel resource decisions.
 - c. Personnel resource decisions are necessarily complex, and must account for "organizational issues" such as the changing nature of Coast Guard missions, the Federal Budget, maintaining promotion opportunities for military and civilian employees, nuances of managing the military workforce, operations tempo (OPTEMPO) and personnel tempo (PERSTEMPO) considerations, legal requirements and protections for employees, Administration and Congressional directives, and other factors that are not captured in a Staffing Standards Manual. While Staffing Standards apply well to decisions on a one-by-one basis, they do not fully account for personnel management needs on an organizational level.
3. **Responsibility.**
 - a. The Coast Guard's Chief of Staff has overall responsibility for Coast Guard Staffing Policy. Commandant (G-CCS) reviews and validates completed staffing standards, with the Office of Programs (G-CPA) as the lead staff element. Validated standards are cleared through interested HQ staff offices and approved by the Chief of Staff.
 - b. Headquarters Program Managers are responsible to initiate and to develop staffing standards studies based on the needs of their program. Changing missions, new technology, revisions to training curriculums, or any number of issues can require a

study to reevaluate the unit or activity's staffing. The Staffing Standards Manual is the baseline used in requesting Personnel Allowance Amendments (PAAs), preparing Resource Proposals (RP) and all other requests to change the personnel structure at a particular unit. A current, approved standard allows the program to request a change based on the standard. If no approved standard exists, each request for a change to personnel resources requires an individual workload analysis that can be validated.

- c. It is important to understand that a validated Coast Guard staffing standard alone may not be enough, in and of itself, to gain additional resources. Often, Coast Guard needs exceed the funding available. However, staffing standards form the objective basis to seek added resources for the Coast Guard, as well as the basis to reprogram existing resources from within to meet new or changing missions.

B. Staffing Guidance

1. Types of Manpower and Their Employment: The Coast Guard shall use the most efficient and effective mix of civilian and military (both Active and Reserve Component) manpower, as well as contract manpower to accomplish Coast Guard missions. The following is general manpower classification guidance. Specific manpower designation criteria are contained in Section B.3 of this Chapter.
 - a. Military Manpower shall be used for operations and direct operational support, and for support elements when there is a likelihood of deployment in support of crisis, emergency, or surge operations. Military manpower may be used in non-operational activities when physical security risks justify use of military personnel, to provide military-unique knowledge and skills, to augment operational forces, to provide for military career progression and overseas and sea-to-shore rotation, for esprit de corps, or when military positions are more cost effective or reduce operational risk. Military manpower may be used in lieu of civilians or contractors when the work conditions, physical security risk, or locations are not compatible with, or cost effectively tailored to, civilian or other employment.
 - b. Civilian Manpower shall be used to perform inherently governmental workload that does not require military personnel, or when civilian manpower is more cost effective than contract or other manpower arrangements.
 - c. Reserve Component Manpower shall be used to augment active Coast Guard forces and support functions and to provide a cost effective force for national employment. Reserve Component manpower shall be assigned missions that can readily respond, within established parameters, to national emergencies and contingencies.
 - d. Contract Manpower may be used to augment operational forces and full-time Coast Guard manpower when contract manpower is more efficient and responsive; to satisfy short-term, surge and unpredictable workload requirements; when it is

determined to be more competitive based upon valid studies; or when workload is a commercial activity and no requirement exists for in-house performance.

2. Staffing Management Responsibilities

- a. The most efficient and effective organization shall be implemented to accomplish approved Coast Guard missions. Manpower management studies shall establish a link between mission objectives and program performance by developing quantifiable and measurable performance indicators that directly support the manpower requirement determination process.
- b. Periodic staffing studies will seek to minimize staff, overhead, and support organizations, with a goal to ensure the highest proportion of resources are dedicated to high priority mission activities.
 - (1) The use of deputies, assistants, and other such arrangements will be kept to an absolute minimum.
 - (2) Headquarters and staff activities will be maintained at the lowest possible level and will not involve day-to-day management of mission activities. The role of headquarters and staffs should be focused on setting policy, planning, programming, budgeting and measuring performance against established objectives.
 - (3) Organizational structures will minimize overhead supervision and maintain high worker to supervisor ratios to encourage workplace empowerment, job enrichment and productivity.
 - (4) Military officer to enlisted ratios should be balanced against workload requirements, education requirements, the need to maintain good order and discipline, meet regulatory law enforcement and requirements, and correctly staff Coast Guard units.
 - (5) Civilian grades will be based upon workload and skill requirements and will not be over-structured to create non-essential or marginal employment.
 - (6) Management positions in support activities will provide reasonable opportunities for the development of both military and civilian personnel at all levels, to improve retention, and produce competent leaders.
 - (7) OMB Circular A-76 requires all federal agencies to consider the use of the private enterprise system when assessing personnel requirements to provide goods and services. The lead staff element for consideration of contracting for services is the Office of Finance and Procurement (G-CFP). Existing staffing standards are often used as the basis for the organization studies conducted to meet A-76 objectives. A-76 reviews measure workload at a specific unit or activity and result

in a most efficient organization (MEO) determination for that activity/unit. Staffing standards measure average workload for like units/activities Coast Guard wide to determine the number of personnel required to perform actual workload. Therefore, an approved MEO for a specific activity/unit becomes the standard for that activity while the staffing standard remains the standard for those like activities without an MEO.

- (8) Limits on the distribution of commissioned officers (O-4 and above) and E8 and E9 enlisted personnel are prescribed by law. Further guidance has been published regarding civilian personnel in high grade positions (GS-14 and GS-15), as well as certain series targeted for reduction under Administration policy. In general, staffing will be at the minimum grade necessary for satisfactory performance of the function.

3. Manpower Designation Criteria. Manpower on the Coast Guard's Personnel Allowance List shall carry the highest applicable designation code from the following designation codes. See also Figure 1-1 for relative priority in designating Coast Guard manpower.

- a. Coast Guard Operations (Code A). Code "A" shall be given to all deployable units and units involved in military operations. Code A units include all afloat units, aviation units, Marine Safety Offices, Groups, Stations, Port Security Units, communications stations, Aids to Navigation Teams, command and control elements, Coast Guard Activities commands, operations centers, Tactical Law Enforcement units and teams, units required as a part of a DoD time phased force deployment list (TPFDL) and individual billets that require deployment in support of Coast Guard plans, national contingency plans, or war plans. Chaplains and medical personnel are included in this category, although not normally engaged in the use of deadly force.

Billets under this criterion are considered "military essential" because military training and experience is necessary for the successful performance of the work and, except in emergency situations, the use of noncombatant contract and civilian personnel is deemed an unreasonable risk. Assignment of military personnel to positions in the infrastructure allows for the cost effective cross-utilization of military personnel.

- b. Coast Guard Operations Augmentation (Code B). Code "B" is given to units or individual billets in the infrastructure that are needed to ensure there is an adequate inventory of military personnel for each occupation and skill level necessary to satisfy projected Coast Guard operational emergency, crisis, or surge manpower demands, that cannot be met with billets or units designated "code A". This category includes military billets where civilian employment is incompatible due to non-availability of skilled workers, unusual working conditions, or frequent deployment. This category also includes those billets that provide direct logistics and maintenance support to Coast Guard forces.

Billets used for crisis staffing and augmentation of Coast Guard operations are given code “B”. These billets may be located anywhere in the infrastructure, including staff elements (Areas, Districts, Activities, Groups, Headquarters, and Headquarters units), Integrated Support Commands, Maintenance Augmentation Teams, and Maintenance and Logistics Commands.

Code “B” includes military billets which are required for a mobilization, military contingency, surge, or other emergency contingency requirement, but are assigned to positions in the infrastructure during normal operations to provide for their cost-effective use and training. In all cases, the incumbents must be qualified to perform the duties and tasks required by the designated position, and the duties and responsibilities must provide the military with the experience and training necessary to upgrade or remain proficient in primary or secondary military specialties. Such designations shall conform to the readiness requirements and training needs of the Coast Guard, and not exceed the number required to augment units in the operating forces during a mobilization or other emergency situation. Examples include staffing of Incident Command Centers, surge staffing required by operations plans or war plans, staffing of forward operating bases, response plans involving natural disaster response, and staffing for Crisis Action Centers. Billets coded “B” for these reasons are typically designated in a current Operations Plan, contingency planning document, watch bill, or other planning document.

Code “B” should also be used when: (1) the work requires unusual working conditions, frequent deployment with Coast Guard units, rotating work schedules greater than 40 hours per week, or other conditions that are not compatible with civilian employment and that cannot be made a “condition of employment” for recruitment of civilians; or (2) the work is at locations where skilled civilians are not available; or, (3) civilians cannot be hired and cost effectively trained to perform the work. Billets designated Code B due to unusual hours or non-availability of civilians in the local workforce must have documentation in support of that designation.

Billets under this criterion are considered “military essential” because the personnel from these positions are used to support deployment of Coast Guard forces, achieve full manning of operating units for crisis or emergency conditions, provide for rotation of military personnel after commencement of sustained operations, or permit Coast Guard operations in situations incompatible with civilian employment.

- c. Coast Guard Unique Knowledge & Skills (Code C). Code “C” shall be assigned to billets that require knowledge and skills acquired primarily through military training and current military experience for the successful performance of the prescribed duties. In certain cases, these billets are required to be military by law.

Billets under code “C” include those that are directly and ultimately responsible for the accomplishment of assigned missions and functions; exercise authority (direction

and control) over Coast Guard forces, programs, property (physical assets and information), funds, and personnel; and make decisions and set policy on behalf of the government. This includes positions such as the Commandant, Vice Commandant, Chief of Staff, Area Commanders, District Commanders, and Commanding Officers who exercise command or military authority over military subordinates or subordinate commands; and the Superintendent and Commandant of Cadets of the Coast Guard Academy.

Code “C” also includes military planners and program management billets in operational and staff organizations to ensure that Coast Guard officials maintain management authority and thorough control over Coast Guard operations. These billets are involved with the planning, advice, and policy formulation for matters that are distinctly Coast Guard in nature; the authoritative direction over all aspects of military operations, joint training, and logistics; strategic planning and direction of the Coast Guard and Coast Guard forces; contingency planning; resource prioritization, resource allocation, and resource management; operational intelligence; development of Coast Guard doctrine and tactics; determining operational and logistics requirements; and other activities where current, first hand military experience, knowledge, and judgment are required.

Code “C” also includes all billets such as military judges, legal officers, or judge advocates, where knowledge and experience must be acquired through special studies, prosecutions, or adjudicatory procedures under the Uniform Code of Military Justice (UCMJ).

Code “C” includes military billets in program management, testing facilities, shipyards, or other production centers where actual “hands on” Coast Guard experience is needed for acceptance determinations or where military training, judgment, and recent experience are used to ensure that a program is directed toward Coast Guard requirements and applications.

Code “C” includes military instructors at units conducting military training based on their own previous training and practical experience. For example, this would include requirements for boot camp instructors, instructors in fleet training centers and Coast Guard resident training centers, or instructors providing aviation or field training.

Code “C” includes military personnel management billets performing specialized counseling, direction, disciplinary control, Coast Guard recruiting, personnel assignment, military equal opportunity advisors or adjudicators, or other management activities associated with a military workforce. Such billets include assignment officers, recruiting offices, personnel reporting units, military personnel officers, and “administrative” officers at staff and operational units where the primary function is the management of military personnel.

Code “C” includes Coast Guard liaison or duty billets at other organizations such as the White House, United Nations, Congressional Affairs representatives, and billets serving with or for executive departments and agencies such as the Departments of Defense, State, Justice, Transportation, NSA, CIA, INS, ONDCP, JIATFs, EPIC, when the duties require military unique knowledge and skills.

Billets under this criterion are considered “military essential” because the required military experience must be of a first-hand nature acquired through the command of Coast Guard forces or by participating in or conducting Coast Guard operations, tactics, or systems operations and must be more substantial than simple familiarity with Coast Guard administration procedures or similar capabilities reasonably attained by civilian employees or possessed by retired military.

- d. Military Image and Esprit de Corps (Code D). Billets in the infrastructure shall receive code D when they are traditionally or customarily used to provide a military “esprit de corps” or to promote public affairs purposes. This includes the Coast Guard band, Honor Guard, drill teams, personal aides to Flag Officers or senior officials including the President, the USCGC EAGLE, and anywhere that military personnel are traditionally assigned to project a military presence or image to the public.

These billets are considered “military essential” because only military personnel can project a military presence or image, or demonstrate military expertise.

- e. Military Rotation (Code E). Billets in the infrastructure that would not otherwise require military incumbents are designated with code “E” to provide a rotation base for sea-to-shore or overseas assignments when the number of military billets coded A through D are not sufficient to satisfy peacetime rotation requirements.

The billets coded under this criterion are cooperatively managed by the Assistant Commandant for Human Resources and program force management officials. These billets shall be justified by occupational specialty; based on established assignment, rotation, and career development policies; and shall consider TEMPO goals, personnel turnover, and permanent change of station (PCS) turbulence. Maximum stability of personnel assignment and minimum rotation are consistent with the Coast Guard Personnel Manual policies.

This manpower is considered “military essential” because it is needed to maintain military tour lengths and military personnel turnover at appropriate levels and, by so doing, keep recruitment and training costs to a minimum.

- f. Military Career Progression (Code F). Billets in the infrastructure that do not otherwise require military incumbents, but provide career paths for military personnel when the number of military coded A through E are not sufficient to satisfy peacetime military career progression requirements, shall be coded F.

The Coast Guard shall designate billets for military career progression only after considering other options for managing career fields such as restructuring grade requirements and providing additional training. When considering key management positions in support activities, programs shall ensure that decisions to designate billets for military career progression are managed so as to maintain reasonable opportunities for the development of both military and civilian personnel. Decisions as to the number of billets coded under this criterion are made by occupational specialty and are cooperatively managed at the Headquarters level by the Assistant Commandant for Human Resources, workforce management staffs within programs, and force management officials. Final decisions concerning manpower requirements necessary to support career progression must be made in conjunction with decisions pertaining to manpower needed to support “Military Rotation” (code E) and “Legislatively Mandated Floors” (code J).

These billets are considered “military essential” because the assignments provide leadership experience necessary to produce competent military leaders and the day-to-day work assignments necessary to develop military skills within a given specialty at all levels of a military career.

- g. Civilian Authority and Direction (Code G). This criterion is used for positions that are necessary to exercise civilian management authority (direction and final decision making) over government policy, programs, property (physical assets and information), funds and treasury accounts, or employees. The incumbents of these positions make decisions on behalf of the government and are directly and ultimately accountable for the accomplishment of assigned missions and functions.

This category includes civilians that approve strategic plans, program objectives, functional requirements, and performance criteria; policies, directives, and regulations in assigned missions and functions.

Examples of positions that fall under this criterion include the Chief Financial Officer; the Director of the National Pollution Funds Center; and other Senior Executive Service personnel.

Positions with Code G are designated “civilian essential”.

- h. Civilian Expertise and Control (Code H). This criterion is used to identify positions that are required to ensure that civilian decision making officials (accounted for under criterion G above) maintain sufficient levels of oversight, control, and accountability over government operations and Federally funded projects and tasks. The incumbents in these positions provide corporate knowledge and technical expertise necessary to ensure that government and public interests are advanced and that government contractual obligations are fully satisfied by playing an active and informed role in

areas such as contract administration and evaluation. This includes civilians in staff and line functions that require current technical knowledge and on-the-job training and work experience necessary to effectively influence government decision-making and progress into positions of authority and direction (code G, above).

Examples include: contracting officers; accountants; audit liaisons; personnel who collect public funds; personnel who direct the acquisition, use, and disposition of government property; civilian personnel management experts; program resource directors for Assistant Commandants; personnel who process or respond to Freedom of Information Act requests; Federal licensing actions; and personnel who prepare government testimony and responses to Congress and audit organizations; civilians that interpret and/or execute Federal laws and develop associated policy and regulatory guidance in assigned functional areas in resource management, procurement/contracting, civilian personnel administration; render value judgments, develop recommendations, and establish management criteria and objectives on behalf of the government such as legal opinions, program priorities, budget requests, performance evaluation, contract awards, quality assurance, personnel selection and appraisal, security clearances; perform duties that require official government representation such as prosecution and adjudicatory functions, conduct of criminal investigations and administrative hearings, Federal license certifications, foreign government relations, employee labor relations, legislative activities, public affairs, financial collection activities; or are in formal personnel management programs designed to provide progression into civilian positions that require government corporate knowledge and technical expertise.

Identification and validation of civilian requirements under this criterion are based upon a study or assessment of what functions and duties must be performed by government employees and other conditions that must exist in order to maintain sufficient government expertise and oversight. Guidance governing this criterion will vary by function based upon its nature, complexity, magnitude of contract reliance, organizational level, geographic dispersion, and other factors (including access to ultimate decision maker). Every effort must be made to avoid situations where government decision making in a functional area is weighted in favor of, or limited to, options presented by the private sector interests.

Positions with Code H are designated “civilian essential”.

- i. Civilian National Security or Operational Risk (Code I). This criterion is used to identify civilian manpower requirements (not included under codes G and H, above) that are required to perform highly sensitive national security, intelligence or investigative work and to ensure a ready and government controlled source of technical competence in areas necessary to the effectiveness of Coast Guard operations.

Examples include civilians that are required to ensure a ready and government-controlled source of technical expertise or capability that is essential for the effective and timely response to, and sustainment of, a mobilization or other emergency requirement such as civilians required for critical core logistics, or where there is concern that contractor performance will not continue during crisis; Civilians that maintain and operate Telecommunications, Computer Security (COMPUSEC), and Communications Security (COMSEC) equipment; Research and development work that is of a theoretical or experimental nature conducted in direct support of Coast Guard interests, or for development of critical defense technologies or force modernization; other unique or valuable workforce skills that should be maintained by the Coast Guard in the national interest; or civilians in formal personnel management programs designed to provide progression into civilian positions that are justified based on national security or operational risk.

Identification and validation of civilian requirements under this criterion shall be based upon assessments of what functions and levels of contractor reliance are appropriate without compromising national security or operational effectiveness.

Positions with Code I are designated “civilian essential”.

- j. Executive Order, Law, Treaty and International Agreement (Code J). Military billets or civilian positions shall be designated with code J when they could be considered for private sector performance, but are needed to satisfy a specific provision of law, Executive Order, treaty, or International Agreement. These billets or positions do not qualify as “military essential” or “civilian essential.” These billets or positions are coded J to indicate that the only reason they are restricted from cost comparison or direct conversion to private sector performance is because of a law, Executive Order, treaty, or International Agreement.
- k. Vacant.
- l. Coast Guard Management Determination (Code L). Civilian or military manpower shall be designated with code L when the manpower requirements have been exempted from cost comparison, direct conversion to private sector performance, or conversion from military to civilian status. This authority is vested in the Chief of Staff, based upon the recommendation of the appropriate Assistant Commandant responsible for program oversight, the Chief Financial Officer, or the Superintendent of the Coast Guard Academy. These billets or positions are restricted from review solely on the basis of the Chief of Staff’s decision for reasons not covered under the criteria coded A through J above. These billets or positions cannot be classified as “military essential” or “civilian essential.” These billets or positions are coded L to indicate that the only reason they are restricted from cost comparison, direct conversion to private sector performance, or conversion from military to civilian is because of a Chief of Staff management determination.

- m. Retained In-house Based on Cost Comparison (Code M). Civilian or military manpower shall be designated with code M when a determination has been made within the last 5 years that in-house military and/or civilian manpower perform the work in a more cost effective fashion based on the results of a cost comparison study. Units shall periodically review the work to determine if it can be more efficiently or cost effectively performed by another source. In such situations, units shall conduct a cost comparison study to obtain the most efficient and cost effective method of performance following relevant Coast Guard guidance.
- n. Pending A-76 or Federal Activities Inventory Reform Act (FAIR) Act. Action (Code N). Code N is used for civilian or military manpower that is:
- (1) In the process of being converted to contract support based on the results of a cost comparison study or direct conversion.
 - (2) Pending the results of an in-progress cost comparison study.
 - (3) Deferred from a cost comparison study or direct conversion to contract performance, pending the results of a force restructuring decision. Restructuring initiatives include official requests for approval of base closure, realignment, or consolidation actions.
 - (4) Where a cost comparison study was initiated but not completed due to exceeding legislatively prescribed time completion constraints and was terminated.
- o.-q. Vacant
- r. Subject to Review (Code R). Billets and positions shall be designated code R for military or civilian manpower performing work that is commercial in nature and has not yet been subject to a cost comparison study or direct conversion to contract review.
- s. Converted From Contract to In-House Based on Cost Comparison (Code S). Civilian or military manpower shall be designated with code S when a contracted function has been converted to in-house performance as a result of a cost comparison study.
- t. Converted from Contract Without Cost Comparison Due to Unsatisfactory Performance or Unreasonable Prices (Code T). Civilian or military manpower shall be designated with code T when a contracted function involving 10 or fewer FTE has been converted to in-house performance without a cost comparison based on a contracting officer's determination that the performance was unsatisfactory or that fair and reasonable prices could not be otherwise obtained.
- u. No Satisfactory Commercial Source (Code U). Military and civilian manpower shall be designated with code U when a contracting officer or other appropriate official can demonstrate one of the following:

- (1) After issuing a solicitation and receiving offers, it was determined that the use of a commercial source would cause an unacceptable delay or disruption of an essential program.
- (2) No satisfactory commercial source was capable of providing the product or services based on lack of a response to a formal solicitation.
- (3) Based on the results of an attempted direct conversion from in-house to contract performance, in-house performance of activities that involve 10 or fewer civilian FTE has been determined to be satisfactory and the costs are fair and reasonable.

Figure 1-1 Coast Guard Manpower Criteria Codes and Precedence of Coding

This chart shows the relative priority of coding billets and positions within the Coast Guard.

Order of Precedence for Coding Manpower	Inherently Governmental		Exempt From Competition		Type of Manpower
	<div>A</div> CG Operations		<div>B</div> CG Operations Augmentation		Military Essential
	<div>C</div> USCG Unique Knowledge & Skills		<div>D</div> Military Image & Esprit de Corps		
			<div>E</div> Military Rotation		
			<div>F</div> Military Career Progression		
	<div>G</div> Civilian Authority & Direction				Civilian Essential
<div>H</div> Civilian Expertise & Control		<div>I</div> Civilian National Security & Operational Risk			
<div>J</div> EO, Law, Treaty, or International Agreement		<div>L</div> CG Management Determination		Restricted	
Subject to Competition					Not Restricted
<div>M</div>	Retained In-House Based on Cost Comparison				
<div>N</div>	Pending A-76 Action				
<div>R</div>	Subject to Review				
<div>S</div>	Converted from Contract Based on Cost Comparison				
<div>T</div>	Converted from Contract Without Cost Comparison Due to Unsatisfactory Performance or Unreasonable Prices				
<div>U</div>	No Satisfactory Commercial Source				

4. Specialty and Paygrade Determinations.

- a. Commissioned Officers. Commissioned Officers perform an array of professional functions in the Coast Guard. Depending on the specific job requirements of a billet, a Commissioned Officer may be acting in a narrow technical specialty, a broad management function, or within an operational specialty.
 - (1) Specialties are assigned during staffing standard determinations. Specialties are based on primary responsibility embodied in the Officer Billet Code (OBC) of a given billet. No single OBC is adequate to describe the full range of responsibilities of a billet, however the OBC should capture the primary responsibility of the billet.
 - (a) Operational specialties are those specialties such as Marine Safety, afloat operations, shore operations, and aviation. These specialties are managed in a cooperative effort between the Headquarters Program Manager, the Coast Guard Personnel Command, and work force and specialty managers. Career progression must be maintained to allow the correct level of experience and training to fill jobs of increased responsibility and complexity.
 - (b) Technical specialties are those specialties such as engineering (all types), legal, and financial management. These specialties are also managed in a cooperative effort between the Headquarters Program Manager, the Coast Guard Personnel Command, and work force and specialty managers. Career progression opportunities must be maintained to allow the correct level of experience and training to fill jobs of increased responsibility and complexity throughout the Coast Guard.
 - (c) General managerial positions are those positions which require a broad knowledge of Coast Guard operations and programs, but which do not require highly specialized training, education, or experience to successfully hold. These positions generally have no specified career progression pattern, but remain essential to Coast Guard management. Many senior management positions in the Coast Guard are “general” in nature.
 - (d) Officer specialty management is a valid, recognized need of the Coast Guard. Operational rotations, specialty assignments, and general management positions form the basis for a successful Coast Guard career. The Officer Career Development Guidebook and the Personnel Manual, COMDTINST M1000.6 (series) provide deeper discussions of this area. OBCs are shown in Figure 1-2.

- (2) Officer rank is assigned during staffing standard determinations. Military rank is determined by the duties and responsibilities of the position.
- (a) Degree of responsibility--dollar value of facilities and equipment, impact of decisions, number of personnel in the command, scope of the mission and/or program area, operational capabilities of the command, dual responsibility billet such as Base XO/Group XO.
 - (b) Span of control--number of personnel reporting directly to the officer.
 - (c) Line versus staff--operational or non-operational nature of the personnel in the officer's span of control.
 - (d) Professional skill requirements--what technical or managerial capabilities, special training requirements, and special experience requirements are needed?
 - (e) Level of subordinate, lateral, and superior commands--what are the grade levels and responsibilities of similar billets?
 - (f) Career path needs--the officer billet structure should provide for a progression to meet career needs within operational and technical specialties within the overall officer billet pyramid.
 - (g) Controlled grade legal restrictions – grades O-4 and above are controlled by law. To assist the Chief of Staff, who is responsible to ensure that the Coast Guard's billet structure is consistent with these restrictions, program managers should ensure that rank determinations are at the lowest level possible consistent with meeting mission or billet requirements. Rank determinations should be at the lowest level possible consistent with meeting mission or billet requirements.

Figure 1-2 Officer Billet Codes

General Administration 01 - 09

- 01 General Command and Staff
- 02 Civil Rights
- 03 Public and International Affairs
- 04 Legal
- 05 Reserve Programs
- 06 Inspection
- 07 Chaplains
- 08 Special Aides/Ass't/Liaison
- 09 Staff Services and Security

Personnel 10 - 19

- 10 Personnel - General
- 11 Human Resources Management (Officer)
- 12 Human Resources Management (Enlisted)
- 14 Recruiting
- 15 Training
- 16 Personnel Systems
- 17 Personnel Services
- 18 Physician's Assistant
- 19 Medical Administration

Management 20 - 29

- 20 Management - General
- 21 Planning, Programming & Budgeting
- 22 Data Processing
- 23 Research and Development
- 25 Planning - General
- 26 Information Resources Management
- 27 Management Contingency/Defense
- 28 Acquisition/Project Management

Comptrollership 30 - 39

- 30 Comptrollership
- 31 Financial Management
- 32 Fiscal Operations
- 33 Supply and Inventory Management
- 34 Supply Operations
- 35 Contracting
- 36 Resale Programs

Marine Safety 40 - 49

- 40 Marine Safety - General
- 41 Commercial Vessel Safety - General
- 42 Port Safety/Environmental Protection - General
- 43 Port Contingency Planning
- 44 Vessel Traffic Services
- 45 Vessel Inspection
- 46 Vessel Technical
- 47 Marine Investigation
- 48 Hazardous Material
- 49 Explosive Loading

Engineering 50 - 59

- 50 Engineering - General
- 51 Ocean Engineering
- 52 Naval Engineering
- 53 Engineering Afloat
- 55 Civil Engineering
- 56 Industrial Engineering
- 58 Electronics Engineering
- 59 Engineering Physics

Aviation 60 - 69

- 60 Aviation - General
- 61 Aviation Engineering Administration
- 62 Aircraft Maintenance, Overhaul, Repair and Supply
- 64 Aviation Electronics
- 65 Aviation Administration
- 67 Air Liaison and Special Staff

Operations 70 - 79

- 70 Operations - General
- 71 Search and Rescue
- 72 Marine Science Activities
- 73 Readiness
- 74 Communications
- 75 Aids to Navigation
- 76 Intelligence
- 77 Law Enforcement
- 78 Ice Operations

Boating Safety 80 - 89

- 80 Boating Safety - General
- 81 Auxiliary/Education
- 82 Boating Affairs
- 83 Boating Standards
- 84 Boating Investigation

Health Services 90 - 99

- 90 Health Care Administration
- 91 Physician
- 92 Physician Assistant
- 93 Nurse
- 94 Dentist
- 95 Pharmacist
- 96 Environmental/Occupational Health
- 97 Physical Therapy
- 98 Psychology
- 99 Optometry

- b. Chief Warrant Officers. Staffing standards only include a specialty determination for Chief Warrant Officers. No paygrade determinations are made, and all CWO billets are listed as “CWO4”. Chief Warrant Officer specialty determinations are based on the skills defined in Chapter 1-D of the Personnel Manual, COMDTINST M1000.6 (series). In practice, certain CWO billets are used for developmental purposes leading to operational command. These determinations are made in a cooperative effort between the Headquarters Program Managers and the Coast Guard Personnel Command. An abbreviated CWO specialty description, taken from the Personnel Manual, COMDTINST M1000.6 (series) is shown in Figure 1-3.

Figure 1-3 Chief Warrant Officer Specialties

Aviation Engineering Specialty (AVI)

Warrant officers serving in the specialty of aviation engineering must meet the requirements of Aircraft Maintenance Officer as described in the Coast Guard Air Operations Manual, COMDTINST M3710.1 (series). They are operational and technical specialists in the field of aircraft maintenance. They serve as aircraft maintenance officers, assistant aviation engineering officers, and aviation project officers.

Boatswain Specialty (BOSN)

At sea, warrant officers serving in the specialty of boatswain are specialists in seamanship. They serve as commanding officers of small vessels, and as division and repair party officers. Ashore, warrant officers serving in the specialty of boatswain are general duty specialists in operational commands and seamanship specialists on inspection duties. They serve as commanding officers of small units; as first lieutenant, and yard boatswain and security officer at larger units.

Communications Specialty (COMM)

Warrant officers serving in the specialty of communications are operational and technical specialists in the field of communications. They serve at communications stations, as assistants to communications officers in such billets as communication security, and may serve as assistants to communication officers.

Electronics Specialty (ELC)

Warrant officers serving in the specialty of electronics are technical specialists in the field of ship and shore electronic equipment. Electronic equipment is defined as any equipment which transmits or receives intelligence by electrical or electromagnetic means (including landline and sonar equipment).

Finance and Supply Specialty (F&S)

Warrant officers serving in the specialty of finance and supply organize, plan, and supervise the work of personnel engaged in procurement, stowage and issue of supplies, including personnel engaged in commissary departments and disbursing offices. Appointments to the warrant specialty of finance and supply may be subject to certification for finance and supply duties by Commandant (G-CPM) or Commandant (G-CFM).

Material Maintenance Specialty (MAT)

Warrant officers serving in the specialty of material maintenance are operational and technical specialists in the fields of repair, maintenance, damage control and fire fighting aboard ship and at shore units.

Medical Administration Specialty (MED)

Warrant officers serving in the specialty of medical administration will administer nonprofessional aspects of medical and dental facilities ashore and afloat.

Naval Engineering Specialty (ENG)

Warrant officers serving in the specialty of naval engineering are operational and technical specialists in the field of engineering and in machinery repair. They serve as engineering officers on smaller vessels and as assistants to engineering officers on larger vessels.

Personnel Administration Specialty (PERS)

Warrant officers serving in the specialty of personnel administration are specialists in general and personnel administration. They serve as personnel, education, and classification officers.

Port Safety and Security Specialty (PSS)(RESERVE ONLY)

Warrant officers serving in the specialty of port safety and security are specialists in port safety, maritime security/anti-terrorism, enforcement of maritime laws and regulations and investigative methods.

Public Information Specialty (INF)

Warrant officers serving in the specialty of Public Information foster and establish internal and external communications with the news media, the general public and other agencies to enhance understanding of the Coast Guard's policies, programs, services and activities. Public Information warrants deploy during crisis contingencies as media relations experts. They serve as public affairs officers, assistant public affairs officers, photographic officers, and provide expertise and supervision to personnel in the Public Affairs Specialist rating.

Weapons Specialty (WEPS)

Warrant officers serving in the specialty of weapons are operational and technical specialists in gunnery and ordnance.

Bandmaster Specialty (BNDM)

Warrant officers serving in the specialty of Bandmaster will be in highly visible billets with significant public and media exposure in musical functions. In addition, they will supervise large groups of subordinates as they prepare performances, rehearse and travel to events both nationally and internationally.

- c. Enlisted Personnel. Enlisted personnel perform an array of technical and management functions in the Coast Guard, from journeyman labor to unit command. Staffing standards include a rating and grade determination for enlisted personnel.
- (1) Specialty determinations - for enlisted personnel (ratings) are determined by the skills requires to perform the job as identified in the Enlisted Qualifications Manual, COMDTINST M1414.8 (series), and the Enlisted Qualification Codes Manual, COMDTINST M1414.9 (series). Figure 1-4 is an abbreviated version of the Enlisted Qualifications Manual which describes the current enlisted specialties (ratings) in the Coast Guard.
- (2) Grade determinations - for enlisted personnel are determined by the skills requires to perform the job as identified in the Enlisted Qualifications Manual, COMDTINST M1414.8 (series), and the Enlisted Qualification Codes Manual COMDTINST M1414.9 (series). Additional factors in determining grades include:
- (a) Level of Responsibility
 - (b) Number and grades of subordinates
 - (c) Experience level required
 - (d) Career progression needs to assure consistent personnel opportunities throughout a career
 - (e) Other personnel tempo (PERSTEMPO) considerations, including sea-shore rotation, arduous duty rotations, and overseas rotations.

Figure 1-4 Enlisted Ratings

Airman/Airman Apprentice (AN/AA) - Airmen are in training for aviation ratings.

Aviation Maintenance Technician (AMT)

Responsibilities of the Aviation Maintenance Technician are to perform ground handling and servicing of aircraft and conduct routine aircraft inspections and aviation administrative duties. AMT's will perform Aircrew duties.

Aviation Electronics Technician (AVT)

Responsibilities of the Aviation Electronics Technician are to perform ground handling and servicing of aircraft and perform routine aircraft inspections and aviation administrative duties. AVT's will perform Aircrew duties.

Aviation Survival Technician (AST)

Responsibilities of Aviation Survival Technician are to perform ground handling, servicing and cleaning of aircraft and perform routine aircraft inspections and aviation administrative duties. The AST will perform Aircrew duties of a rescue swimmer.

Boatswain's Mate (BM)

Boatswain's Mates are proficient in deck and boat seamanship, are the principal enlisted rating for command afloat and ashore, and have a working knowledge of all Coast Guard programs (SAR, ATON, etc.) performed or related to the marine environment.

Damage Controlman (DC)

Damage Controlmen qualify in the techniques, skills, use and maintenance of equipment for damage control, carpentry, fire fighting, pipe fitting, and are responsible for maintaining and repairing damage control equipment and for preserving watertight integrity.

Electrician's Mate (EM)

Electrician's Mates stand watch, operate, and maintain motors, generators, switchboards, gyros, main propulsion control systems, IC equipment, and flight deck equipment.

Electronics Technician (ET)

The Electronics Technician (ET) rating is responsible for installing, maintaining and, in certain situations, operating the command and control, communications, computers, intelligence and sensor systems used in all Coast Guard mission areas.

Fire Control Technician (FT)

Fire Control Technicians operate and maintain shipboard weapons control systems.

Fireman (FN) /Fireman Apprentice (FA)

Firemen are in training for engineering and certain hull ratings.

Food Services Specialist (FS)

Food Service Specialists prepare food, operate food service equipment, and maintains sanitary food service/preparations/storage areas.

Gunner's Mate (GM)

Gunner's Mates are responsible for operation and maintenance of weapon systems, magazines, gun systems, machine guns and small arms.

Health Services Technician (HS)

Health Services Technicians assist in treating sick and injured Personnel in clinical or emergency situations.

Investigators (IV) (Reserve Rate Only)

The Investigator rating is an emergency rate, qualified by experience and knowledge in the techniques of criminal investigation, protective services, intelligence, counterintelligence, and the use of related issued equipment.

Machinery Technician (MK)

Machinery Technicians operate, maintain, and repair internal combustion engines, gas turbines, main propulsion power transmissions equipment; operate, maintain and repair auxiliary, refrigeration, air conditioning, electrical, hydraulic power units and ship equipment.

Marine Science Technician (MST)

Marine Science Technicians conduct marine safety activities and perform scientific duties.

Musician (MU)

Musicians play one or more musical instruments; provide music for recruiting functions, military ceremonies, public and foreign functions.

Port Securityman (PS) (Reserve Rate Only)

Port Securityman are specialists fully qualified in the skills and knowledge used in enforcing the laws, regulations, and orders relative to the safety and security of vessels, waterfront facilities, navigable waterways, ports and harbors, and the natural marine environment.

Public Affairs Specialist (PA)

Public Affairs Specialists foster and establish internal and external communications with the news media, the general public and other agencies to enhance understanding of the Coast Guard's policies, programs, services and activities. Public Affairs Specialists deploy aboard Coast Guard units ashore, aircraft and units at sea during crisis contingencies as photographers and media relations experts. They advise unit commanders in conducting public affairs programs; they make recommendations concerning the execution of media relations, community relations and internal information programs, and they produce materials and coordinate activities in support of those programs.

Quartermaster (QM)

Quartermasters serve as Officer-In-Charge, officer of the deck, assistants to the officer of the deck and to the navigator; perform communications, navigation, and bridge watch duties; maintain navigational instruments and keep navigational time; and serve as controllers and assistant controllers in operations centers.

Radarman (RD)

Radarman perform basic and control functions of CIC as plotters, operators, status-board keepers, and talkers; maintain CIC displays; advise on capabilities, limitations, and conditions of assigned CIC equipment.

Seaman (SN) / Seaman Apprentice (SA)

Seamen are in training for deck, weapons, administrative and certain electronics ratings.

Seaman Recruit (SR)

Seaman Recruits are undergoing recruit training to become oriented to the Coast Guard and a military environment.

storekeeper (SK)

Storekeepers budget, order, receive, inventory, and account for purchases and requisitions.

Telecommunications Specialist (TC)

The Telecommunications Specialists are responsible for the operation and management of the Coast Guard Communication System (COMMSYS) ashore and afloat twenty four hours a day; and serve as the designated rating for Coast Guard Standard Workstation system management.

Telephone Technician (TT)

Telephone Technicians install, maintain, and repair telecommunications systems encompassing the latest technologies in telephone systems and equipment; voice, data and video networks; and intercom, public address and antenna systems.

Yeoman (YN)

Yeoman perform personnel, clerical, and administrative duties; furnish information on pay and allowance entitlements, coordinate travel, maintain Military Personnel Data Records (PDR) and personnel accounting records under PMIS/JUMPS.

- d. Civilian Personnel. Staffing Standards shall include a tentative grade and series for civilian positions. Final grade and series determinations are made by Coast Guard Personnel Command (CGPC-cpm) based on an approved Position Description. For managers, the “Handbook of Occupational Groups and Series”, published by the federal Office of Personnel Management, is a useful resource in making tentative series and grade determinations. In addition, the CGPC-cpm Command Staff Advisors are available to assist in development of Staffing Standards for Coast Guard functions. Figure 1-5 contains further information regarding civilian specialty areas.
- (1) Grade level - is determined by the duties and responsibilities of the position with consideration for span of control, supervisory control and chain of command.
- (2) Position series - (specialty) is determined by the Coast Guard Personnel Command (CGPC-cpm) in accordance with published federal personnel management policies. The two most common types of civilian employees are General Schedules (GS) and Federal Wage System (FWS). A generalized listing of occupational series is listed as Figure 1-5.

Figure 1-5 Civilian Occupational Groups

GS: The abbreviation and symbol for General Schedule. The General Schedule is the basic classification and compensation system for white collar occupations in the Federal Government as established by the Classification Act of 1949.

Occupational Groups: Related occupations in the General Schedule that are grouped together numerically within the same multiple of 100 (for example: GS-0100, Social Science, Psychology, and Welfare Group; GS-0200, Personnel Management and Industrial Relations Group).

Series: A subgroup of an occupational group that includes all jobs at the various skill levels in a particular kind of work. Series are assigned specific numerical codes (for example: GS-0110, Economist Series; GS-0318, Secretary Series; GS-1410, Librarian Series) for purpose of identification and personnel management. Jobs within a series are similar to each other with regard to subject matter, and basic knowledge and skill requirements. Generally, a series corresponds to a recognized occupation in the Federal service and includes all jobs at the various grade levels in that particular kind of work.

OUTLINE OF POSITION CLASSIFICATION PLAN FOR GENERAL SCHEDULE (GS) OCCUPATIONAL GROUPS

GS-0000--MISCELLANEOUS OCCUPATIONS GROUP (Not Elsewhere Classified)
GS-0100--SOCIAL SCIENCE, PSYCHOLOGY, AND WELFARE GROUP
GS-0200--PERSONNEL MANAGEMENT AND INDUSTRIAL RELATIONS GROUP
GS-0300--GENERAL ADMINISTRATION, CLERICAL, AND OFFICE SERVICES GROUP
GS-0400--BIOLOGICAL SCIENCES GROUP
GS-0500--ACCOUNTING AND BUDGET GROUP
GS-0600--MEDICAL, HOSPITAL, DENTAL, AND PUBLIC HEALTH GROUP
GS-0700--VETERINARY MEDICAL SCIENCE GROUP
GS-0800--ENGINEERING AND ARCHITECTURE GROUP
GS-0900--LEGAL AND KINDRED GROUP
GS-1000--INFORMATION AND ARTS GROUP
GS-1100--BUSINESS AND INDUSTRY GROUP
GS-1200--COPYRIGHT, PATENT, AND TRADE-MARK GROUP
GS-1300--PHYSICAL SCIENCES GROUP
GS-1400--LIBRARY AND ARCHIVES GROUP
GS-1500--MATHEMATICS AND STATISTICS GROUP
GS-1600--EQUIPMENT, FACILITIES, AND SERVICES GROUP
GS-1700--EDUCATION GROUP
GS-1800--INVESTIGATION GROUP
GS-1900--QUALITY ASSURANCE, INSPECTION, AND GRADING GROUP
GS-2000--SUPPLY GROUP
GS-2100--TRANSPORTATION GROUP

FWS: The abbreviation and symbol for Federal Wage System. The Federal Wage System is the basic classification and compensation system for trades and labor occupations in the Federal Government as established by Public Law 92-392.

Job Family: Broad grouping of occupations in the Federal Wage System which are related in one or more ways such as: similarity of functions performed, transferability of knowledge and skills from one occupation to another, or similarity of materials or equipment worked on (for example: 4400, Printing Family).

Occupation: A subgroup of a job family that includes all jobs at the various skill levels in a particular kind of work. Series are assigned specific numerical codes (for example: 2892, Aircraft Electrician; 4604, Wood Working) for purpose of identification and personnel management. Jobs within an occupation are similar to each other with regard to subject matter, and basic knowledge and skill requirements.

OUTLINE OF POSITION CLASSIFICATION PLAN FOR FEDERAL WAGE SYSTEM (FWS) JOB FAMILIES

2500 -- WIRE COMMUNICATIONS EQUIPMENT INSTALLATION AND MAINTENANCE FAMILY
2600 -- ELECTRONIC EQUIPMENT INSTALLATION AND MAINTENANCE FAMILY
2800 -- ELECTRICAL INSTALLATION AND MAINTENANCE FAMILY
3100 -- FABRIC AND LEATHER WORK FAMILY
3300 -- INSTRUMENT WORK FAMILY
3400 -- MACHINE TOOL WORK FAMILY
3500 -- GENERAL SERVICES AND SUPPORT WORK FAMILY
3600 -- STRUCTURAL AND FINISHING WORK FAMILY
3700 -- METAL PROCESSING FAMILY
3800 -- METAL WORK FAMILY
3900 -- MOTION PICTURE, RADIO, TELEVISION, & SOUND EQUIPMENT OPERATING FAMILY
4000 -- LENS AND CRYSTAL WORK FAMILY
4100 -- PAINTING AND PAPER FAMILY
4200 -- PLUMBING AND PIPEFITTING FAMILY
4300 -- PLIABLE MATERIALS WORK FAMILY
4400 -- PRINTING FAMILY
4600 -- WOOD WORK FAMILY
4700 -- GENERAL MAINTENANCE AND OPERATIONS WORK FAMILY
4800 -- GENERAL EQUIPMENT MAINTENANCE FAMILY
5000 -- PLANT AND ANIMAL WORK FAMILY
5200 -- MISCELLANEOUS OCCUPATIONS FAMILY
5300 -- INDUSTRIAL EQUIPMENT MAINTENANCE FAMILY
5400 -- INDUSTRIAL EQUIPMENT OPERATING FAMILY
5700 -- TRANSPORTATION/MOBILE EQUIPMENT OPERATION FAMILY
5800 -- TRANSPORTATION/MOBILE EQUIPMENT
6500 -- AMMUNITION, EXPLOSIVES, AND TOXIC MATERIALS WORK FAMILY
6600 -- ARMAMENT WORK FAMILY
6900 -- WAREHOUSING AND STOCK HANDLING FAMILY
7000 -- PACKING AND PROCESSING FAMILY
7300 -- LAUNDRY, DRY CLEANING, AND PRESSING FAMILY
7400 -- FOOD PREPARATION AND SERVING FAMILY
7600 -- PERSONAL SERVICES FAMILY
8200 -- FLUID SYSTEMS MAINTENANCE FAMILY
8600 -- ENGINE OVERHAUL FAMILY
8800 -- AIRCRAFT OVERHAUL FAMILY
9000 -- FILM PROCESSING FAMILY

C. Work Activities.

1. General. The three types of work activities at Coast Guard units are duty, watchstanding and day work. Military personnel perform any one or more of these activities depending on the roles or mission of the unit. Civilian personnel generally perform day work except at units where they stand duty on a routine schedule in conformance with their position description (e.g. VTS watches, fire fighters or security personnel).
2. Duty. Duty is a requirement for personnel to be aboard a unit and available to perform mission requirements and work critical to the unit's operational readiness. A duty day is usually 24 hours during which personnel are expected to stand watches or perform day work as needed.
3. Watchstanding. Watchstanding is the performance of certain operational functions requiring personnel to be at specific places for specified times which are scheduled in advance. Examples include communications, operations center, OOD, security, machinery and tower watches.
 - a. All Coast Guard military personnel may be classified as either watchstanders or nonwatchstanders.
 - (1) Watchstanders are personnel regularly assigned to stand watches during all or part of their work or duty days.
 - (2) Nonwatchstanders are personnel not regularly assigned to stand watches even though they may be on duty. (e.g. a small boat coxswain on duty who is aboard the unit and available but is not assigned to stand any specific watches.)
 - b. The distinction between watchstanders and nonwatchstanders is important for staffing purposes to determine the availability of personnel for the different types of productive work activities. Individuals standing watches may, depending on the nature of the watch, be simultaneously performing collateral tasks. For example, a radio watchstander may be assigned because of the need to have a live watch guarding a radio frequency at the radio position, but the watchstander is processing messages, updating publications and performing other work while at the position. Messenger watches on the bridge or quarterdeck may be performing housekeeping work when not actively employed in routing message traffic or performing other watch related duties.
4. Day Work. Day work is the performance of all tasks other than watchstanding, service diversions and unit training during a workday. This term should not be confused with "dayworker", who is a nonwatchstander who does not stand duty.

5. Collateral Duty. Collateral duty is work in addition to one's primary responsibilities assigned by the Commanding Officer. Some collateral duties are ingrained in the primary functions of the unit (e.g., CMS custodian, electronics material, etc.) and are referred to as functional collateral duties. Others, although very important, reside on the periphery (e.g., morale, Mutual Assistance, etc.). Functional collateral duties are measured and included in the staffing calculation; other collateral duties are not.
6. Training. Short term non-resident Class C and on the job training (OJT) are included as productive work activities under this section. This training includes any travel to or from schools. Any leave taken is excluded (counted as non-availability). Unit training is not included here (also counted as non-availability). This category of training excludes schools that are staffed through Training Allowance Billets (TABs). TAB billets exist for all "A" schools, mandatory pre-arrival "pipeline" training, and "C" schools in excess of 20 weeks.

D. Availability Time.

1. Definition. Availability time is the time available for productive work activities. It is calculated by excluding "overhead" time as described in this section.
2. Application. Twelve standard workweeks are calculated in this section. The most appropriate workweek should be selected for the activity being staffed.
3. Standard Workweeks. A standard workweek is the established time per week individuals are required to be at their unit for duty, watchstanding and day work. All workweek calculations are based on 365.25 days/year, 52.18 weeks/year, and 4.35 weeks/month.
 - a. Military Ashore. The Coast Guard standard workweeks for military personnel ashore are grouped into three broad categories; these categories average 68, 42 and 40 hours per week. The workweek varies depending on the unit type. These three workweek categories are attempts by the Coast Guard to establish routines which meet the variety of workloads ashore and still provide needed personal time.
 - (1) The 68 hour workweek averages 1.75 duty days (one in four rotation) with non-duty days spent either as 8 hour workdays, or as two consecutive 24 hour liberty periods. This workweek is the objective for Coast Guard shore units with 24 hour operational readiness requirements such as multi-mission Coast Guard stations and air stations. The watchstanding requirements for these units (e.g. radio and telephone watches) are often stood by designated watchstanders in the duty sections in 4 hour shifts (0400-0800, 0800-1200, 1200-1600 etc.).

- (2) There are two 42 hour workweeks at shore facilities. They are the eight hour continuous watch and the 12 hour continuous watch. Continuous watch workweeks are common at units with continuous watchstanding requirements such as radio and communications stations, VTS facilities and operations centers. These workweeks may be used in place of the 68 hour workweek at shore units with 24 hour operational readiness requirements if local circumstances permit sufficient flexibility in scheduling day work.
 - (a) The eight hour continuous watch workweek yields an average of 5.25 days of eight hour watches or work shifts per week and totals 2,192 hours per year. The scheduling of eight hour watches or work shifts varies greatly from unit to unit.
 - (b) The 12 hour continuous watch workweek averages 3.5 days of 12 hour watches and totals 2,192 hours per year.
 - (3) The standard 40 hour workweek consists of five work days a week, eight hours a day.
- b. Civilians Ashore. The Coast Guard standard workweeks for civilian personnel are the five day standard workweek and the 72 hour fire fighter workweek which averages 3 duty days/week and totals 3, 757 hours per year.
 - c. Military Afloat. Standard workweeks for military personnel assigned to floating units average 68 hours in port (1 in 4 duty rotation). Workweeks at sea average 81 hours. It is assumed that all leave is taken only during inport periods.
 - (1) The 68 hour workweek inport averages 1.75 duty days (1 in 4 rotation), with 3.25 non-duty days spent as eight hour workdays and two days as consecutive 24 hour liberty periods. The total hours per year for the 68 hour workweek inport varies with the unit's inport time.
 - (2) The 81 hour workweek at sea is based on Navy standards contained in the Navy Total Force Manpower Policies and Procedures, OPNAVINST 1000.16 (series). The workweek provides 8 hours of sleep per day, 2 hours per day for messing and 2 hours per day of personal time, with additional personal time on weekends. Watchstanders average 56 hours of watch per seven day week and 11 hours of day work and/or operational evolutions. Non- watchstanders perform 67 hours of daywork and/or operational evolutions per week.

4. Non-Availability Allowances - are recognized activities which limit the availability of personnel for duty, watchstanding and day work at their permanent duty stations during the standard workweek.
 - a. Leave. Includes regular, emergency, compensatory, sick, and administrative leave. Leave during normally scheduled liberty periods is not counted.
 - b. Holidays. Fixed at ten (10) federal holidays per year. It is assumed that personnel scheduled for duty on holidays are given compensatory time off.
 - c. Service Diversions. Includes but not limited to masts, quarters, inspections, sick call, colors, business at personnel office. These figures are derived from the Navy Total Force Manpower Policies and Procedures, OPNAVINST 1000.16 (series).
 - d. Unit Training. Includes all hands and departmental drills, lectures and training exercises. Unit training does not include on-the-job training (OJT) or short term non-resident class "C" schools (less than 20 weeks in duration). Short term non-resident training and OJT are explicitly covered during work measurement. Class "C" schools greater than 20 weeks in length or part of cutter pipeline training are staffed through training allowance billets TABs). These figures are derived from the Navy Total Force Manpower Policies and Procedures, OPNAVINST 1000.16 (series).
5. Availability Time Calculations. Availability time is the average amount of time per standard workweek personnel permanently assigned to units are available for duty, watchstanding and day work. Availability times are calculated by subtracting the average amount of time personnel are not available for these duties from standard workweeks. Depending on a unit's particular roles and missions, military staffing may be based on one of the three productive work activities whichever requires the highest staffing level in order for the unit to perform its mission. If the availability time of the primary work activity is used to determine staffing, sufficient staffing will be available to perform the work required in the other two work categories. Figure 1-6 summarizes the twelve (12) standard workweeks. Figures 1-7 through 1-17 are the detailed workweek calculations.

SUMMARY TABLE OF AVAILABILITY TIME
(see Figures 1-7 to 1-17 for detailed calculations)

		<u>Servicewide Average</u>	
		Hrs/ Week	Hrs/ Year
1.	<u>Military Workweeks Ashore</u>		
a.	<u>Watchstanders</u>		
	68 Hour Workweek (1 in 4)	39.24(1)	2047.5
	8 Hour Continuous Watch	37.71(1)	1967.71
	12 Hour Continuous Watch	37.71(1)	1967.71
b.	<u>Nonwatchstanders</u>		
	68 Hour Workweek (1 in 4)	39.24(1)	2047.5
	5 day Regular Workweek	33.31(3)	1738.12
2.	<u>Military Workweeks Afloat</u>		
a.	<u>Watchstanders</u>		
	68 Hour Workweek (1 in 4 –Inport)	36.49(1)	(4)
	81 Hour Workweek (1 in 3 -Underway)	67.00(3)	(4)
b.	<u>Nonwatchstanders</u>		
	68 Hour Workweek (1 in 4 -Inport)	36.49(1)	(4)
	5 day Regular Workweek(Inport)	30.79(3)	(4)
	Underway Workweek	67.00(3)	(4)
3.	<u>Civilian Availability Time</u>		
	5 day Regular Workweek	32.87(3)	1715.1
	72 Hour Firefighters Workweek	64.43(1)	3361.96

Footnotes:

1. Duty Availability
2. Watchstanding Availability
3. Daywork Availability
4. Annual total depends on proportion of time inport

Figure 1-6

Peacetime Military Watchstander 68 Hour Workweek
Ashore Units (1 in 4 Duty Day Rotation)

Hours/week Duty Status	42.00	Dayworker Status	26.00
-Hrs Leave/Week	-2.76		-2.02
-Holiday Hrs/Week			-1.53
-Training Hrs/Week			-1.47
-Service Diversions Hrs/Week			-1.00

Avg. Weekly
Availability

39.24	19.98
Duty Day	Dayworker
Hrs/Week	Hrs/Week

<u>Duty Day breakdown:</u>	13.08	Hrs/Week Watch(1 in 3 Watch Rotation)
	5.84	Hrs/Week Daywork
	13.08	Hrs/Week Sleep
	3.27	Hrs/Week Messing
	3.97	Hrs/Week Personal Time/Readiness Standby Time

Total Productive Availability:

Watch Hrs/Week:	13.08
Watch Hrs/Year:	682.51
Daywork Hrs/Week:	25.82
Daywork Hrs/Year:	1347.3
Duty Hrs/Week:	39.24
Duty Hrs/Year:	2047.54

Figure 1-7

Peacetime Military 8 Hour Continuous Watch Workweek
Ashore Units

Hours/week=	42.00
-Hrs Leave/Week=	-2.76
-Holiday Hrs/Week	-1.53
<hr/>	
Ave. Weekly Availability	37.71 Hrs/Week
Average Annual Availability	1967.71 Hrs/Year
<u>Total Productive Activity:</u>	
Watch Hrs/Week:	37.71
Watch Hrs/Year:	1967.71
Duty Work Hrs/Year:	N/A
Daywork Hrs/Year:	N/A

Figure 1-8

Peacetime Military 12 Hour Continuous Watch Workweek
Ashore Units

Hours/week=	42.00
-Hrs Leave/Week=	-2.76
-Holiday Hrs/Week	-1.53
<hr/>	
Ave. Weekly Availability:	37.71 Hrs/Week
Average Annual Availability:	1967.71 Hrs/Year
<u>Total Productive Activity:</u>	
Watch Hrs/Week:	37.71
Watch Hrs/Year:	1967.71
Duty Work Hrs/Year:	N/A
Daywork Hrs/Year:	N/A

Figure 1-9

Peacetime Military Non-Watchstander 68 Hour Workweek
Ashore Units (1 in 4 Duty Day Rotation)

Hours/week Duty Status =	42.00	Dayworker Status	26.00
-Hrs Leave/Week =	-2.76		-2.02
-Holiday Hrs/Week			-1.53
-Training Hrs/Week			-1.47
-Service Diversions Hrs/Week			-1.00
<hr/>			
<u>Avg. Weekly Availability</u>	39.24		19.98
	Duty Day		Dayworker
	Hrs/Week		Hrs/Week
<u>Duty Day breakdown:</u>	11.21	Hrs/Week Daywork	
	13.08	Hrs/Week Sleep	
	3.27	Hrs/Week Messing	
	11.68	Hrs/Week Personal Time/Readiness	
		Standby Time	
 <u>Total Productive Availability:</u>			
Daywork Hrs/Week:	31.19		
Daywork Hrs/Year:	1627.50		
Duty Hrs/Week:	39.24		
Duty Hrs/Year:	2047.54		
Watch Hrs/Year:	N/A		

Figure 1-10

Peacetime Military 5 Day Regular Workweek
Ashore Units

Hours/week=	40.00
-Hrs Leave/Week=	-2.69
-Holiday Hrs/Week	-1.53
-Training Hrs/Week	-1.47
-Service Diversion Hrs/Week	-1.00
<hr/>	
<u>Avg. Weekly Availability</u>	33.31 Hrs/Week
<u>Average Annual Availability</u>	1738.12 Hrs/Year
 <u>Total Productive Availability:</u>	
Daywork Hrs/Week:	33.31
Daywork Hrs/Year:	1738.12
Watch Hrs/Year:	N/A
Duty Hrs/Year:	N/A

Figure 1-11

Peacetime Military Inport Watchstander 68 Hour Workweek
Afloat Units (1 in 4 Duty Day Rotation)

Hours/week Duty Status =	42.00	Dayworker Status	26.00
Hrs Leave/Week=	-5.51		-4.04
-Holiday Hrs/Week			-1.53
-Training Hrs/Week			-1.47
-Service Diversions Hrs/Week			-1.00
<hr/>			
<u>Avg. Weekly Availability</u>	36.49		17.96
	Duty Day		Dayworker
	Hrs/Week		Hrs/Week
<u>Duty Day breakdown:</u>	12.16	Hrs/Week Watch (1 in 3 Watch Rotation)	
	5.43	Hrs/Week Daywork	
	12.16	Hrs/Week Sleep	
	3.04	Hrs/Week Messing	
	3.70	Hrs/Week Personal Time/Readiness	
		Standby Time	
<u>Total Productive Availability:</u>			
Watch Hrs/Week:	12.16		
Daywork Hrs/Week:	23.39		
Duty Hrs/Week:	36.49		

Figure 1-12

Peacetime Military Underway Workweek
Afloat Units

Hours/week Onboard	168.00
Hours/week – sleep	-56.00
Hours/week – messing	-14.00
Hours/week - Personal/free time	-17.00
<hr/>	
Work Hours/Week	81.00
- Training	-7.00
- Service Diversion	-7.00
<hr/>	
Availability	67.00
 <u>Watchstanders: (1 in 3 rotation)</u>	
Watch Hrs/Week	56.00
Daywork Hrs/Week	11.00
Duty Hrs/Week	N/A
 <u>Non-Watchstanders</u>	
Daywork Hrs/Week	67.00
Watch Hrs/Week	N/A
Duty Hrs/Week	N/A

Figure 1-13

Peacetime Military Inport Non Watchstanders 68 Hour Workweek
Afloat Units (1 in 4 Duty Day Rotation)

Hours/week Duty Status =	42.00	Dayworker Status	26.00
-Hrs Leave/Week =	-5.51		-4.04
-Holiday Hrs/Week			-1.53
-Training Hrs/Week			-1.47
-Service Diversions Hrs/Week			-1.00
<hr/>			
<u>Avg. Weekly Availability</u>	36.49		17.96
	Duty Day Hrs/Week		Dayworker Hrs/Week
<u>Duty Day breakdown:</u>	10.42	Hrs/Week Daywork	
	12.16	Hrs/Week Sleep	
	3.04	Hrs/Week Messing	
	10.87	Hrs/Week Personal Time/Readiness Standby Time	
<u>Total Productive Availability:</u>			
Daywork Hrs/Week:	28.38		
Watch Hrs/Week:	N/A		
Duty Hrs/Week:	36.49		

Figure 1-14

Peacetime Military Inport 5 Day Workweek
Afloat Units

Hours/week =	40.00
-Hrs Leave/Week =	-5.21
-Holiday Hrs/Week	-1.53
-Training Hrs/Week	-1.47
-Service Diversion Hrs/Week	-1.00
<hr/>	
<u>Avg. Weekly Availability</u>	30.79 Hrs/Week
<u>Total Productive Availability:</u>	
Daywork Hrs/Week:	30.79
Duty Hrs/Week:	N/A
Watch Hrs/Week:	N/A

Figure 1-15

Peacetime Civilian Workweek
5 days/week, 8 hours/day

Hours/week=	40.00
-Hrs Leave/Week=	-5.56
-Holiday Hrs/Week	-1.53
-Training Hrs/Week	-0.04
<hr/>	
Avg. Weekly Availability	32.87 Hrs/Week
Average Annual Availability	1715.1 Hrs/Year

Figure 1-16

Peacetime Civilian Firefighters Work Week
3 Duty days/week, 24 Hour Duty Day

To be developed in accordance with current regulation

Figure 1-17

NOTES TO ACCOMPANY FIGURES 1-6 THROUGH 1-17

1. Afloat Availability is based on Coast Guard wide average of 26.09 weeks at sea for cutters.
2. Standard Watch rotation is 1-in-4 for duty days, with watches scheduled in 4 hours of watch followed by 8 hours of non-watch (4 on – 8 off).
3. Inport Daywork is performed 5 days per week plus Saturday for duty standers.
4. The non-availability allowances are based on US Navy standards in the Navy Total Force Manpower Policies and Procedures, OPNAVINST 1000.16 (series).
5. Long term non-availability of military personnel due to medical, discipline, etc., reasons are staffed through the servicewide support allowance billets. Transfer time, command overlaps, and leave enroute new duty stations are staffed through support allowance billets.
6. Annual availabilities for afloat workweeks are dependent on average number of weeks spent inport. Variances greater than 3 weeks from standard in note 1 requires recalculation of standard availability.
7. Leave amounts are based on US Navy estimates in the Navy Total Force Manpower Policies and Procedures, OPNAVINST 1000.16 (series) of actual leave taken used vice leave earned, in accordance with OMB Circular A-11.

E. Staffing Standards Development

1. General. Personnel requirements for an activity are determined by calculating the work content in the categories of duty, watchstanding and/or daywork and dividing by the applicable availability times of personnel in each category.

$$\frac{\text{WORK CONTENT}}{\text{AVAILABILITY TIME}} = \text{BILLETS/POSITIONS REQUIRED}$$

Work content is expressed as time and refers to the time required for the qualified worker to accomplish the specified task required by management or the command. Work content is established through the application of various work measurement techniques. In many instances, it is necessary to calculate each work content category separately and to base unit staffing upon the work category, which requires the greatest staffing level. An alternative method of justifying personnel for existing activities is to base staffing upon past performances under average conditions. This includes the use of historical or engineered data, management information and work reporting systems.

2. Procedures for Developing a Staffing Standard.

- a. Responsibility. Staffing Standards Studies can only be conducted for units that are in existence. G-CPA oversees the process of staffing standards development but it is the responsibility of program and facility managers to initiate, fund, and manage the staffing standards study.
- b. Initiation of the Study. The Office of Programs (G-CPA) should be notified, in writing, of the intention to develop a staffing standard. The notification should include the following information (at a minimum):
 - (1) Study Objective. Identify the type of unit or activity to be studied (e.g., TT shop, PERSRU).
 - (2) Statement of work. Will be conducted in-house (by Coast Guard employees) or contracted to a private firm? A formal statement of work should be included for contracted studies.
 - (3) Project officer.
- c. Conducting the Study.
 - (1) Determine Scope of Study. Identify affected units/personnel and determine the scope and size of the study.

(2) Develop a Data Plan.

- (a) Identify work. Function, activity or services can study information on specific work centers/tasks provided. For example, Yeoman can be measured at PERSRUs and at the other units performing general administrative work. Tasks must be grouped into work categories such as direct, indirect, travel and training (other than unit training).
- (b) Determine the work measurement technique. Work measurement is the use of recognized techniques to measure the amount of time required for tasks involving some human activity. The following summarizes, in decreasing order of desirability the work measurement techniques used in developing Coast Guard staffing standards:
 - 1. Time Study. The time study method is based on analysis of the actual time expended on a work operation or elements of an operation. A worker is observed, his performance timed, and the times recorded.
 - 2. Work Sampling. Work sampling uses statistically sound sampling design to measure work activity using random observations.
 - 3. Historical Standards (statistical records). This technique requires analysis of man-hour and work unit data available or collected in sufficient quantity to assure data consistency, accuracy and reliability. Data is frequently collected from records, reports, logs and manuals.
 - 4. Subject Matter Expert Estimates. An estimate is made by breaking a task into elements and then having people technically trained in this particular work, estimate how long it "should" take for each of the elements to be completed. Data can also be collected through interviews and questionnaires.
 - 5. Staffing Pattern Ratios. This technique uses historical records to compare ratios of employees (e.g., the ratio of support personnel to personnel supported). This technique can be combined with other methods of measurement, (e.g., the standard of one legal clerk to each lawyer, may have been derived from a technical estimate plus staffing pattern ratios).

- (c) Prepare Data Plan. A data plan should be submitted to G-CPA-2 for approval prior to beginning data collection. The data plan should be a deliverable in contracted studies. Key elements of data plans include the following:
1. Data collection method(s)--Work to be studied--Work measurement technique
 2. How expected biases, such as resistance to change, unpopularity of shift work, bad data, sampling collection, and other factors will be countered.
 3. How the correct quantitative measures of costs and benefits will be selected so the data can be collected and recorded consistently and will be persuasive in the analysis of alternative staffing standards;
 4. Experiment design to assure control of critical confounding factors while maintaining statistical independence and adequate power to evaluate interaction terms at the appropriate levels:
 5. Method of statistical analysis;
 6. Schedule of data collection visits for maximum efficiency while accounting adequately for variables, if appropriate.
- (3) Data collection. Conduct data collection as determined in the data plan.
- (4) Analyze Data. Collected data is analyzed and presented in appropriate form for submission for validation.
- (5) Validate Data. Analyzed data is validated for statistical accuracy and adherence to appropriate guidelines and procedures of work measurement.
- d. Develop the Staffing Standard. Using the workload data collected, divide by the appropriate availability time to determine the number of billets/positions required. Submit the staffing calculations to G-CPA for review. A comparison to current staffing should be included, if applicable. Fractional billets/positions are calculated as follows:
- (1) Fractions of personnel of 0.5 and above are rounded up.

- (2) Fractions less than 0.5 may warrant an extra billet/position. The following formula ensures daily work overload is less than 30 minutes per day per billet/position:

RP = Billets required by workload/availability
(rounded to nearest whole number)

RO = Maximum Overload factor

DD = Average number of days worked per week

HH = Available productive hours per week

$$RO = \frac{RP \times .5 \times DD + (RP \times HH)}{HH}$$

If RO is less than RP then billets/positions = RP + 1

Example: A unit staffing calculation computes to 5.45 required personnel (RP) for a shore station using a nonwatchstander's five day regular workweek.

$$\frac{5 \times 0.5 \times 5 + (5 \times 33.31)}{33.31} = 5.38$$

Since the overload factor of 5.38 is less than the calculated staffing of 5.45, an extra billet (5 + 1) is required. The total unit personnel authorization for this shore station is six.

- e. Draft Chapter for Staffing Standards Manual. The required format for a staffing standard chapter is provided below:
- (1) Description. Describe the unit to be staffed. Include unique work centers, missions which may complicate the standard or require variables in calculation, and the date of data collection.
 - (2) Glossary. Include terms that are not common knowledge to field personnel or have multiple definitions.
 - (3) Standards Development. Describe the method(s) used to develop the standard; include constraints or special considerations made during the study development.
 - (4) Staffing Calculation. Describe the workweek and calculations used to develop the standard.
 - (5) Example. Include a step-by-step example calculation of the standard.

Note: The published Staffing Standard should be concise and contain only information needed to compute the staffing standard. Detailed data plan and other statistical information should be forwarded with the background package submitted to G-CPA for validation and historical filing for audit purposes.

- f. Format Review. COMDTINST M5215.6 (series), The Coast Guard Directives System Manual, provides additional guidance.
- g. Formal Review and Clearance. Submit the draft chapter to G-CPA. Background data should be an enclosure to the draft standard. Data calculations, sample plan and any other data necessary for an audit should be included. This information will be retained in G-CPA files, if the standard is approved. The draft chapter will be distributed to interested Headquarters offices for concurrent clearance. The draft standard will be returned with approval, disapproval, or instructions for change. If approved, it should be resubmitted to G-CPA in final form.
- h. Final Approval. The standard will be presented to Chief of Staff for approval. G-CPA will notify the Program/Force Manager that the standard is approved and will be published in the next change to the Staffing Standards Manual. G-CPA will file the standard and background data as the historical file available if the standard is audited by OST or GAO.

F. Mobilization Staffing Policy

- 1. Introduction. The policies in this section are reflective of the Coast Guard's relationship to the Navy in times of war or national emergency. As such these policies are consistent with the staffing policies of the Navy stated in U.S. Navy's Manual of Navy Total Force Manpower Policies and Procedures (OPNAVINST 1000.16 (series)). In general, a staffing standard study cannot be conducted for mobilization because the work cannot be measured. This section addresses adjustments that would be needed in the workweek availability, position coverage and productivity factors during mobilization.
- 2. General Policies.
 - a. Mobilization workweeks are established to provide increased capabilities with assigned military and civilian manpower resources. These workweeks are planning factors and may be adjusted as required to meet the command mobilization mission.
 - b. During mobilization, no allowances are made for leave or holidays.

3. Mobilization Workweeks.

- a. Underway workweeks for afloat units remain unchanged.
- b. The continuous watch workweeks remain unchanged, except no allowances are made for leave or holidays.
- c. All 68-hour duty standing workweeks remain unchanged except that no allowances are made for leave or holidays.
- d. The firefighter workweek remains unchanged except that no allowances are made for leave or holidays.
- e. The 5 day workweeks are modified as followed: (1) During Phase I of Mobilization (M-day through M+2 months), the standard 5 days/week, 8 hours/day, 40 hour workweek becomes a 6 days/week, 10 hours/day, 60 hour workweek.

(1) During Phase II of Mobilization (M+2 months and beyond) the standard 5 days/week, 8 hours/day 40-hour workweek becomes a 6 days/week, 8 hours/day, 48 hour workweek.

(2) No allowances are made for leave or holidays.
- f. Figure 1-18 summarizes the mobilization availability hours.

SUMMARY TABLE OF MOBILIZATION AVAILABILITY TIME

		<u>Servicewide Average</u>	
		Phase I	Phase II
		Hrs/ Week	Hrs/ Week
1.	<u>Military Workweeks Ashore</u>		
	a. <u>Watchstanders</u>		
	68 Hour Workweek (1 in 4)	42.00(1)	42.00
	8 Hour Continuous Watch	42.00(1,2)	42.00
	12 Hour Continuous Watch	42.00(1,2)	42.00
	b. <u>Nonwatchstanders</u>		
	68 Hour Workweek (1 in 4)	42.00(1)	42.00
	5 day Regular Workweek	57.53(3)	45.53
2.	<u>Military Workweeks Afloat</u>		
	a. <u>Watchstanders</u>		
	68 Hour Workweek (1 in 4 -Inport)	42.00(1)	42.00
	81 Hour Workweek (1 in 3 -Underway)	56.00	81.00
	b. <u>Nonwatchstanders</u>		
	68 Hour Workweek (1 in 4 -Inport)	42.00(1)	42.00
	5 day Regular Workweek (Inport)	57.53(3)	45.53
	5.5 day Underway Workweek	30.00(3)	30.00
3.	<u>Civilian Availability Time</u>		
	5 day Regular Workweek	60.00(3)	48.00
	Firefighters Workweek	By regulation	

Footnotes:

1. Duty Availability
2. Watchstanding Availability
3. Daywork Availability

Figure 1-18

4. Position Coverage Requirements. Position Manpower Coverage Factors (PMCFs) are used to convert peacetime billet strength to mobilization strength. They are only used for converting 40 hour workweek billets/positions. The PMCFs are based on the increased availability hours for Phase I (60 hours) and Phase II (48 hours) mobilization. For coverage greater than 8 hours per day and 5 days a week, the PMCFs assume that the 60-hour and 48 hour workweeks will be used. The PMCFs convert one peacetime 40-hour workweek billet to the appropriate number of mobilization workweek billets for various levels of position coverage. Figure 1-19 summarizes the PMCFs.

<u>Military Position Coverage Factors</u>			
Coverage Required		Phase I	Phase II
<u>Days/Week</u>	<u>Hours/Day</u>	<u>Billets</u>	<u>Billets</u>
7	24	2.4323	.073
7	16	1.6212	.048
7	12	1.2161	.536
7	8	.8111	.024
6	24	2.0842	.634
6	16	1.3901	.756
6	12	1.0421	.316
6	8	.695	.878
5	24	1.7372	.145
5	16	1.1581	.463
5	12	.8691	.097
5	8	.579	.732

<u>Civilian Position Coverage Factors</u>			
Coverage Required		Phase I	Phase II
<u>Days/Week</u>	<u>Hours/Day</u>	<u>Billets</u>	<u>Billets</u>
7	24	2.301	2.876
7	16	1.5341	.917
7	12	1.1501	.438
7	8	.767	.959
6	24	1.9722	.465
6	16	1.315	1.644
6	12	.9861	.233
6	8	.657	.822
5	24	1.6442	.054
5	16	1.096	1.370
5	12	.8221	.027
5	8	.548	.685

Example:

- (a) Engineering Maintenance for a Group provides 3 MK billets during peacetime for a workweek.
 - (b) During Phase I mobilization, the desired coverage is 7 days per week, 24 hours per day.
 - (c) Phase I billets = 3 peacetime billets x 2.432 PMCF = 7.3 billets -- or 7 billets (fractional round off per section 1-D).
 - (d) Conclusion: In order to staff the 3 Group MK billets during Phase I mobilization covering 7 days per week, 24 hours/day, billets must be increased to 7 MKs.
5. Support Billet Productivity Factors. A number of the support billets are not linked to man-hours of work but to the numbers of personnel or equipment supported. For example, the number of Subsistence Specialists required at a Coast Guard unit is determined by the number of personnel authorized to subsist. When we go to mobilization workweeks, the productivity goes up because the Specialists will be working more days and hours. Based on historical studies the following Workweek Productivity Adjustment Factors have been adopted for mobilization.

		Workweek	Productivity factor
Phase I	M to M+3	60 hours	1.415
Phase II	M+3 and beyond	48 hours	1.166

The productivity adjustment factor indicates that, when the length of the workweek is increased to 60 hours (or a 50% increase) on M-day, total weekly productivity will increase 41.5%. Therefore, the number of personnel authorized to subsist would have to increase by greater than 41.5% before the first mobilization augmentee is required at an activity. This factor has been adopted for use without regard to function (i.e., the productivity adjustment factor adopted for Subsistence Specialists support would also apply to medical support, which is based on the number of outpatient visits per year).

Example:

- (a) Personnel authorized to subsist at the unit in peacetime = 25.
- (b) SS peacetime allowance = 2 for 20 - 30 billets assigned.
- (c) Maximum number of personnel authorized to subsist = $30 \times 1.415 = 43.5 = 44$ for the same two SS during Phase I mobilization.

G. Glossary

Activity. A unit, class of units, organization or installation of distinct identity performing a specific function or mission, e.g., station, yard, air station, ship, class of cutters.

Availability Time. The average amount of time per standard workweek that personnel at their permanent duty stations are available for duty, watchstanding and day work. It is calculated by subtracting all applicable non-availability allowances from the standard workweek.

Billet. A billet represents the duties, skills, responsibilities and command relationship assigned to a military member.

Billet Control Number (BCN). A unique number assigned to each military billet for the purpose of identification and accounting on the Personnel Allowance List (PAL).

Collateral Duty. Duty to which an individual is assigned by the commanding officer and which is in addition to the primary duty.

Enlisted Force/Rating Managers. Force Managers are senior enlisted members assigned to an Assistant Commandant to advise on rating specific issues and changes. Force/Rating Manager assignments are found in the Enlisted Qualifications Code Manual, COMDTINST M1414.8 (series). This oversight includes structural concerns for the rating size and grade distribution, location of billets, setting performance standards, developing job and advancement qualifications and content of formal and on-the-job training.

Mobilization. The process by which the Armed Forces are brought to a state of increased readiness for war or other national emergencies. This includes assembling and organizing personnel, supplies and material for active military service.

Most Efficient Organization (MEO). The organizational structure, manpower requirement and procedures identified as a result of the application of the A-76 review process.

Non-Availability Allowance. Activities, which limit availability of personnel to be at their duty station standing duty during the standard workweek.

Position. A position represents the duties, skills, responsibilities, and supervisory relationships assigned to a civilian employee.

Position Control Number (PCN). A unique number assigned to each position for the purpose of identification and accounting in the Personnel Allowance List (PAL).

Program Manager. Manager of a Coast Guard program, and the resources assigned to perform the missions associated with the program.

Pyramid. Proportion of each paygrade to the total.

- a. Officer Pyramid: Limits are specified by the Commandant for 0-1 through 0-3, by law for 0-4 through 0-8.
- b. Enlisted Pyramid: An ideal percent for each paygrade as a percentage of E4-E7, and by law for E8-E9. Defined by the Assistant Commandant for Human Resources (G-W) to provide desirable promotion flows in realistic reenlistment environments and to conform as closely as possible within the structure specified by Staffing Standards.

Service Diversions. Service diversions are actions required of personnel by regulations or standard routine which must be accomplished during working hours and which detract from an individual's availability to do productive work. Service diversions include sick call, quarters, inspections, business at ship's office, and disbursing office, pay call, and other miscellaneous requirements.

Staffing Standards. Define the quantitative and qualitative manpower required to accomplish identified workloads. Staffing standards are developed using accepted work measurement and data collection techniques.

Standard Workweek. The total established time for duty, watchstanding, and day work. The time during a week when an individual is normally expected to be present at the place of work.

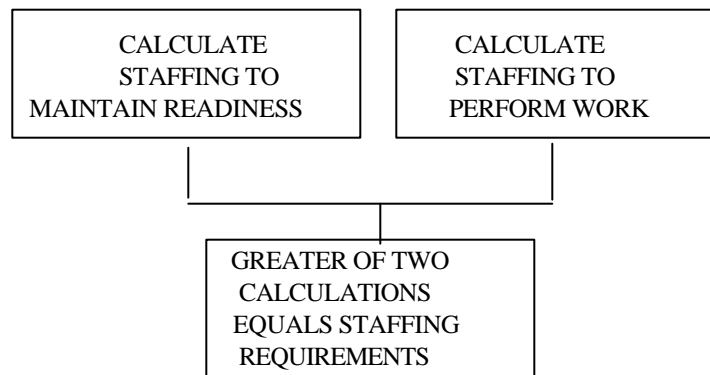
Work Center. A grouping of personnel using similar machines, processes, methods and operations and performing homogenous type work, usually located in a centralized area. The term is used to identify a relatively small activity with a broader functional segment. Personnel within a work center perform work that basically contributes to the same end product or result and their duties are similar or closely related.

Workload. The amount of work in terms of work units which organizations or individuals perform.

Work Measurement. A technique employed for the collection of data on man-hours and production by work units, so that the relationship between work performed and man-hours expended can be calculated and used as the basis for manpower planning, scheduling, production, budget justification, performance evaluations and cost control.

2.F. Air Stations.

1. Introduction. Air stations are land-based units designed and equipped to fulfill Coast Guard missions by operating assigned aircraft. In order to accomplish assigned missions, it is necessary to produce flight hours and is often necessary to maintain an alert posture with one or more aircraft types assigned to a unit. The operational nature of aircraft operations frequently requires the deployment of aircraft to perform work away from the unit. Coincidental with the operation of assigned aircraft is the need to perform unit level maintenance (inspecting, servicing, lubricating, adjusting and replacing parts, minor assemblies and subassemblies, calibrating, repairing or replacing damaged or unserviceable parts, components, or assemblies, modification of material, emergency manufacture of unavailable parts, and providing technical assistance).
- a. Standards Development. The techniques used in this section make extensive use of work reporting and management information systems. These systems include the Personnel Management Information System (PMIS), the Aviation Computerized Maintenance System (ACMS), and the Abstract of Operations-Aircraft report. All Coast Guard air stations make regular reports to these systems. Other staffing criteria, such as duty section and deployment crew sizes, are based on governing directives, various work surveys, professional estimates, and the Aviation Workforce Restructuring initiative. Figures for aircrew flight hour limitations are taken from the Coast Guard Air Operations Manual, COMDTINST M3710.1 (series).
- b. Procedures. The staffing of an air station is mainly driven by two elements: the crews required to maintain an alert posture and the personnel required to perform the measured work at the unit. Measured work for aviation personnel includes the operation of, and the maintenance of, the assigned aircraft. In order to determine the staffing of a unit, calculations must be performed to determine both staffing levels. The staffing of the unit is that which is the greater of staffing to maintain readiness or staffing to perform work. These determinations predicated on “steady state” and do not take into account surge operations. Additional staffing must be considered when surge operations are considered.



2. Staffing Calculations

- a. Standard Workweeks. Aviation personnel at air stations are duty standers with 68-hour workweeks or day workers with 40-hour workweeks. Staffing is predicated on aviation duty-standing personnel standing 1-in-4 duty. Figure 2-18 below represents an example of the average applicable allowances and the calculated hours available for duty and work for aviation personnel and will be used for calculation purposes throughout this section (see Chapter 1 for the source of these figures).

Average Personnel Availability Times

Average Allowances Per Year (Work and/or Duty Days)				
	Leave	Holidays	TAD	Weekends
AVIATORS	25	10	*18	104
AVIATION ENLISTED	25	10	**10	104

Average Allowances Per Day (Work Hours)			
	Breaks	Diversions	Training
AVIATORS	0.5	0.75	0.37
AVIATION ENLISTED	0.5	0.75	0.37

AVAILABILITY CALCULATIONS: (Use numbers from chart above)

DAYS AVAILABLE FOR DUTY PER YEAR	TIME AVAILABLE FOR WORK/YEAR
365 - 25 Days LV - Days TAD	365.25 - LV - Holidays - TAD - Weekends Days X 6.37 Hrs/Day
<u>Aviators</u> : 365-25-18 = 322/1-in-4 duty equals 80.5 Duty Days/Yr.	365.25-25-10-18-104= 208 Days/Year 208 X 6.37 Hrs/Day = 1327 Hours/Yr.
<u>Aviation Enlisted</u> : 365-25-10 = 330/1-in-4 duty equals 82.5 Duty Days Per Year.	365.25-25-10-10-104= 216 Days Per Year 216 X 6.37 Hrs/Day = 1378 Hours/Yr.

*Survey results used in example. Adjust for specific unit history. Includes Proficiency Training.

**Service wide average figures used in example. Adjust for specific unit history.

Figure 2-18

b. Duty Requirements

- (1) Duty Section. In order to calculate the Duty Section size (DSS) of a unit; use Figure 2-19, which presents standards for various readiness postures and aircraft types. A duty section member is a person required to be on board the unit twenty-four hours per day. Note that this table assumes that the duty section will cover all watches such as telephone, radio, security, etc.

DUTY SECTION SIZE

OFFICER	HH-65	HH-60	HU-25	HC-130
Aviators	2	2	2	2
ODO	0	0	0	1
DSS	2	2	2	3

AVIATION ENL	HH-65	HH-60	HU-25	HC-130
Aircrew	1	1	3	5
Line Crew	2	2	2	2
ODO/Watch Captain	1	1	1	1
Rescue Swimmer	1	1	0	0
DSS	5	5	6	8

DUAL AIRCRAFT READINESS (2-B0)

OFFICER	HH-65	HH-60	HU-25	HC-130
Aviators	4	4	4	4
ODO	1	1	1	1
DSS	5	5	5	5

AVIATION ENL	HH-65	HH-60	HU-25	HC-130
Aircrew	2	2	6	10
Line Crew	3	3	3	3
ODO/Watch Captain	1	1	1	1
Rescue Swimmer	2	2	0	0
DSS	8	8	10	14

MULTIPLE TYPE AIRCRAFT DUAL READINESS (2-B0)

OFFICERS	HH-65/HC-130	HH-65/HU-25	HH-60/HC-130	HH-60/HU-25
Aviators	4	4	4	4
ODO	1	1	1	1
DSS	5	5	5	5

AVIATION ENL	HH-65/HC-130	HH-65/HU-25	HH-60/HC-130	HH-60/HU-25
Aircrew	6	4	6	4
Line Crew	3	3	3	3
ODO/Watch Captain	1	1	1	1

Rescue Swimmer	1	1	1	1
DSS	11	9	11	9

Figure 2-19

Example: Determine minimum air station staffing needed to maintain a single readiness posture with the HH-65A. From Figure 2-18:

Duty days per aviator per year = 80.5

Duty days per aviation enlisted per year = 82.5

Staffing Calculations:

Persons Needed = DSS times 365 days/year Duty days/year/person

Aviators Needed = 2 x 365 = 980.5

Enlisted Needed = 5 x 365 = 2282.5

To these totals would be added the non-duty standing command and control allowance for aviators (Commanding Officer, Executive Officer and Operations Officer) and aviation enlisted personnel described in Figure 2-26 and Figure 2-27 below.

Note: These calculations represent a mathematical solution only in the most favorable of conditions. The results are to be used only as an entering argument when calculating personnel requirements to stand duty.

- (2) Additions to Duty Standing Allowance Due to Deployments. To adjust the number of billets provided for duty standing for the workload imposed by the deployment of aircraft, the number of additional billets required to absorb deployment requirements is calculated by using deployment workload and deployment crew size.

- (a) Calculation: *The following equation is used to calculate the number of billets needed to restore duty standing to one-in-four after incorporating the requirements for deployments. Note the use of different deployment crew sizes for the HH-65A depending upon whether or not the deployment is aboard ship.*
- (b) Total Duty Standers = DSS x (365) + DCS x (DAHS) + DCS x (DDAS)
Duty Days/Person/Year, where: DSS Duty Section Size DCS Deployment Crew Size DAHS Days Away From Home Station Per Year DDAS Days Deployed Aboard Ship Per Year 365 Days Per Year.

Note: When calculating based upon historical data, the average of at least three years should be used to avoid the results being driven by short-term anomalies. Deployment times are reported in the Abstract of Operations-Aircraft report by the following categories:

- (c) Days Away From Home Station (DAHS) - This is the total number of days (rounded to the nearest whole day) an aircraft is away from the parent command on any mission for a continuous period of 12 or more hours.
- (d) Days Deployed Aboard Ship (DDAS) - This is the total number of days (rounded to the nearest whole day) which a unit's aircraft are deployed aboard ship. Refer to the Aircraft Employment Standards, COMDTINST 3710.5(series) for guidelines to aircraft DDAS/DAHS. The average deployment crew size (DCS) for aircraft types are as follows:

	HH-65	HH-60	HU-25	HC-130
Aviators	2	2	2	2
Aviation Enlisted				
Shipboard	3	3	NA	NA
Other	2	2	6	3

Note: This number may be increased for Polar Operations deployments, Alaskan Patrol requirements, Operation Bahamas Turks, and Caicos (OPBAT) or for unique missions.

Figure 2-20

c. Flight Crew Calculations.

- (1) Standard Utilization Rates. There is a programmed, standard utilization rate for each aircraft type. The formal document, which establishes a unit allowance of aircraft, is an Operating Facility Change Order (OFCO) which defines the number of each aircraft type assigned and the programmed utilization rates. This standard utilization rate may be increased in specific cases through augmentation when additional funding and personnel resources are provided to a unit to permit higher-than-standard utilization. Resources may also be decreased in a similar manner. Parenthetically, a unit may be assigned an additional aircraft as an operational spare; when **this occurs, it is assumed to be a temporary situation and no increase in flight hours, personnel, or funding result.** Standard utilization rates are:

	HH-65A	HH-60J	C-130	HU-25	C-20	VC-4
Hours/Year/Acft	645	700	800	800	500	700
ALPAT	500					
OPBAT		770				
POPDIV	275					

- (2) Average Sortie Duration. For the purposes of establishing staffing standards, it is assumed that each sortie is the average duration calculated from the Abstract of Operations- Aircraft Report. Sortie duration is used to calculate elements of staffing in the sections, which follow. The average sortie duration for each aircraft type is seven. Average sortie durations are:

	HH-65A	HH-60J	C-130	HU-25
Flt Hours / Sortie	1.5	1.8	3.1	2.5

- (3) Aviators. The minimum number of pilots required to operate Coast Guard aircraft is stated in the Coast Guard Air Operations Manual, COMDTINST M3710.1 (series). Aviator work hours per flight hours are as follows:

	HH-65A	HH-60J	C-130	HU-25
Day VFR	1	2	2	2
Night/IFR	2	2	2	2
Historical Avg	1.7	2	2	2

- (4) Enlisted Aircrew. The Coast Guard Air Operations Manual, COMDTINST M3710.1 (series) specifies minimum aircrew sizes for each aircraft type. The actual aircrew size exceeds this number due to operational requirements (extra scanners, personnel to handle cargo, trainees, etc). Aircrew work hours per flight hour are as follows:

HH-65A	HH-60J	HC-130	HU-25
1.2	2.5	5.7	3.25

d. Measured Work Requirements.

(1) Aviators.

- (a) Concept. Aviators are Coast Guard line officers. As such, they perform collateral duties involved with managing the unit and its resources as assigned by the Commanding Officer in addition to flight duties. Nevertheless, the number of aviator billets for aviators at air stations is calculated based upon the performance of flight-related duties and duty standing. The measured work output of aviators is calculated based on flight hours produced, days of duty stood and days deployed away from home station. Billets to perform these functions are augmented by command and control billets. The number of aviator billets needed to fulfill flight time workload requirements are based upon flight hours programmed for a unit's aircraft, the pilot requirements for those aircraft, the expected number of aviator flight hours produced by an aviator, and the promulgated flight hour limitations on personnel.

- (b) Command and Control. All air stations will be authorized three aviator billets in addition to those calculated to meet duty standing requirements, one each for Commanding Officer, Executive Officer, and Operations Officer. Persons filling command and control billets are expected to fill in as duty standers for short periods of time to meet peak workloads or accommodate the absence of other personnel due to deployments, TAD, etc. For the purpose of determining staffing for aviators, the Commanding Officer and Executive Officer each are presumed to fly two sorties per week when they are aboard the unit. (From Figure 2-18, 208 work days per year divided by five days per week equals 42 weeks; 42 weeks times two sorties per week equals 84 sorties per year). For the purpose of providing sufficient aviators to fly assigned aircraft the desired number of flight hours, at units tasked with a single aircraft readiness (single airframe type, up to four aircraft), the Operations Officer and Engineering Officer are presumed to fly the same number of flight hours per year as the assigned duty-standing aviators. At all other units, the Operations Officer and Engineering Officer are presumed to fly two sorties per week. In summary, an Operations Officer and Engineering Officer will be assigned to a command and control (non-duty standing) status when two or more types of aircraft are assigned to an air station or when a dual B-O is maintained. Additionally, when the number of enlisted aviation billets exceeds 80; the Engineering Officer will be assigned to a command and control status. Assistant Aeronautical Engineering Officers, when assigned or designated, are duty standing aviators. The following tabulates the standard command and control assignments are air stations:

SINGLE AIRCRAFT READINESS			
	HH-65	HH-60	HC-130
COMMAND AND CONTROL			
Commanding Officer	1	1	1
Executive Officer	1	1	1
Billets Supporting Av Flt Hr Requirements			
Operations Officer	1	1	1
Engineering Officer	1	1	1
Asst Engineering Officer	1	1	1
Flight Safety Officer	1	1	1

DUAL AIRCRAFT OR DUAL READINESS		
	HH-65	HH-60
COMMAND AND CONTROL		
Commanding Officer	1	1
Executive Officer	1	1
Operations Officer	1	1
Engineering Officer	1	1
Billets Supporting Av Flt Hr Requirements		
Asst Engineering Officer	1	1
Flight Safety Officer	1	1

****Note:** More than two aircraft types, additional Assistant Aeronautical Engineer designated for each additional aircraft type assigned.

Figure 2-21

- (c) Aviator flight hour requirements. Aviator flight hour requirements for the aircraft assigned to a unit are calculated by multiplying the number of each type of aircraft assigned by the number of flight hours desired from that aircraft by the number of aviator work hours per aircraft flight hour. This is the aviator flight hour requirement. Example: 3 Helo HH-65A unit. Each HH-65A programmed to fly 645 hours/year. Each flight hour generates an average requirement for 1.7 aviator work hours. For example Aviator flight hours required: 645 pgm hrs x 3 helos x 1.7 wk hrs/flt hr = 3289 hours. Annual, monthly and weekly maximum flight hour limitations which are published in the Air Operations Manual notwithstanding, there are practical limitations to the number of flight hours which the aviators assigned for duty standing can provide. The practical limit is defined by such factors as the number of days which an aviator is present at the unit, the number of flights the aviator is normally scheduled for during any given day, the fact aviators cannot fly when medically grounded, constraints due to weather, aircraft non-availability due to mechanical/supply problems, and the fact that aircraft may be deployed and not available to others for flight.
- (d) Staffing Calculations. For the purposes of staffing calculations, the planning factor that each aviator not specifically assigned as the Commanding Officer or Executive Officer will fly one sortie of average duration on 80% of the days which the aviator is available for work (from Figure 2-18) is used. An additional planning factor is that each assigned duty standing aviator will fly at least 25 hours per month on the average in order to maintain operational proficiency. Because the aviator is on leave for the equivalent of one month per year, the expected minimum annual production of flight hours is 275 (25 times 11 months). It is recognized that the amount of flight time, which an aviator produces in any month, varies, but the following figures are the minimum number to be used for the purpose of staffing calculations. Formulation of minimum aviator flight hour productions is as follows:
- (1) Days available for work per year: 208
 - (2) Number of sorties/year: $80 \% \times 208 = 166$
 - (3) Planned aviator flight hour production: 166 sorties x average sortie duration = min hours (no lower than 275). The minimum aviator flight hour production per aircraft is as follows:

	HH-65A	HH-60J	C-130	HU-25
Flight Hours per Year	275	299	515	415

(e) Using the figures above, the number of aviators needed to provide programmed flight hours can be calculated by multiplying program flight hours per airframe times the average work hours per flight times the number of aircraft, divided by the expected minimum annual aviator flight hour production. The following example shows how this is calculated:

- (1) Unit operates three HH-60Js. HH-60Js fly 700 hours per year. Two aviator work hours per flight hour CO/XO absorbs 84 sorties/year x 1.8 avg./flt hours/sortie = 151 flight hours. Total aviator hours required per year 700 hrs/yr. x 2 pilots/hr x 3 aircraft = 4200
- (2) Each HH-60J aviator produces 299 pilot hours/year. 4200 pilot hours required minus CO/XO flight hour's (2 x 151) = 3898 pilot hours 3898 pilots hours required divided by 299 aviator hours/aviator equals 13.0 aviators.

Note: This figure includes the Operations Officer and Aeronautical Engineering Officer but not the Commanding Officer or Executive officer.

Note: This Figure is not the figure for the duty-standing allowance; that allowance was calculated in paragraph 2.b above.

- (3) When calculating aviator requirements, the flight hour contributions by the Command and Control officers such as Commanding Officer, Executive Officer, and at some units the Operations Officer and Aeronautical Engineering Officer must be subtracted from the required pilot hours as appropriate. This procedure can be used to calculate any increase in aviators needed for flight hour augmentation by calculating increased number of aviator hours needed to produce increased number of flight hours.
- (4) Aviation Warrant Officers. All air stations will be authorized one aviation chief warrant officer (CWO) billet to provide aviation engineering maintenance supervision and technical expertise and to assist the with two or more aircraft types may be assigned additional aviation CWO billets.
- (5) Aviation Enlisted Personnel. Work requirements for aviation enlisted personnel concern flight hour requirements, preventive and corrective maintenance of aircraft and ground support equipment (GSE), engineering support, and supervision. Flight hour requirements are established by programmed flight hours and enlisted aircrew sizes. Preventive and

corrective maintenance is primarily measured by work reported through the Aviation Computerized Maintenance System (ACMS). Work required for supervision and preventive and corrective maintenance NOT covered by ACMS was established through work surveys and verified by the Aviation Workforce Structure Study (AWFSS). Work required to maintain GSE was adapted from Navy standards. Standard values for these work factors are:

- (a) Flight Crew Make Ready (FCMR) hours is time required to prepare for flight, start aircraft, and taxi to takeoff position before flight time commences. It also is the time required to secure from flight and return to other duties after the end of a flight. This figure is multiplied by the average number of sorties per year for the aircraft type to achieve programmed flight hours and the average aircrew size to determine total work requirements for this category.

	<u>HH-65A</u>	<u>HH-60J</u>	<u>HC-130</u>	<u>HU-25</u>
FCMR Hours For Aircrewman Per Sortie	1.3	1.8	2.5	2.25

- (b) Aircraft Pre/Thru/Post Flight (APF) number of hours required to perform required pre-flight, through flight, and postflight inspections. These hours are reported through ACMS and are calculated based upon the number of aircraft of each type assigned to the unit. APF work hours per aircraft are as follows:

	<u>HH-65A</u>	<u>HH-60J</u>	<u>HC-130</u>	<u>HU-25</u>
Per Year	803	1679	1752	1716
Per Day	2.2	4.6	4.8	4.7

- (c) Line Crew Duty (LCD) includes work for cleaning aircraft, corrosion control, fueling/defueling, towing, and taxing aircraft. LCD work hours per aircraft are as follows:

	<u>HH-65A</u>	<u>HH-60J</u>	<u>HC-130</u>	<u>HU-25</u>
Per Year	2336	2728	2833	2920
Per Day	6.4	7.5	10.5	8.0

- (d) Aircraft Maintenance (AM) includes all work expended for scheduled and unscheduled preventive and corrective maintenance of aircraft reported through the ACMS and adjusted to include work on aircraft not reported through ACMS such as put away time and tasks which have no associated work card. These times are broken down into two parts; that work which is driven by the number of airframes assigned to the unit (calendar inspections) and that which is driven by

the number of flight hours which the aircraft flies (including "On Condition" work code items). In addition, figures are provided for shop maintenance work hours (SM) and the performance of Quality Assurance (QA) checks which are also a function of the number of airframes attached and the number of flight hours delivered.

Workhours per Airframe per year:

	<u>HH-65A</u>	<u>HH-60J</u>	<u>HC-130</u>	<u>HU-25</u>
Per Year	583	956	2405	650

	<u>HH-65A</u>	<u>HH-60J</u>	<u>HC-130</u>	<u>HU-25</u>
Work Hours Per Flight Hour	8.88	10.23	12.42	7.42

Figure 2-22

- (e) Standard Enlisted Work Hours for measured work for each aircraft type is shown in Figure 2-23. Total workhours required for aircraft operation and maintenance can be calculated by multiplying the first column (Annual Work Hours Per Aircraft) by the number of aircraft of each type assigned. Then add the value of the work hours driven by the number of aircraft flight hours (second column-Work Per Flight Hour) times the number of flight hours to be delivered by each aircraft. A description of the 15% allowance for supervision is provided in the sub-paragraph below. Total annual enlisted work hours for aircraft allowance (summary and calculations from previous section):

Aircraft Type: <u>HH-65A</u>	Annual Work Hours Per Aircraft	Work Hours Per Flight Hour
Flight Crew Make Ready		1.04
Flight Crew Time		1.20
Pre/Post/Thru Flight Inspections	803	
Line Crew Duty	2336	
Aircraft Maintenance	583	8.88
Supervision	438	1.33
TOTAL: 416012.45 (0.15) x (Aircraft Maintenance + Line Crew Hours)		

Aircraft Type: <u>HH-60J</u>	Annual Work Hours Per Aircraft	Work Hours Per Flight Hour
Flight Crew Make Ready		2.50

Flight Crew Time		2.50
Pre/Post/Thru Flight Inspections	1679	
Line Crew Duty	2738	
Aircraft Maintenance	956	10.23
Supervision	554	1.53
TOTAL: 592716.76 (0.15) x (Aircraft Maintenance + Line Crew Hours)		

Aircraft Type: C-130	Annual Work Hours Per Aircraft	Work Hours Per Flight Hour
Flight Crew Make Ready		4.66
Flight Crew Time		5.70
Pre/Post/Thru Flight Inspections	1752	
Line Crew Duty	3833	
Aircraft Maintenance	2405	12.42
Supervision	936	1.86
TOTAL: 892624.64 (0.15) x (Aircraft Maintenance + Line Crew Hours)		

Aircraft Type: HH-25A	Annual Work Hours Per Aircraft	Work Hours Per Flight Hour
Flight Crew Make Ready		2.225
Flight Crew Time		3.25
Pre/Post/Thru Flight Inspections	1716	
Line Crew Duty	2920	
Aircraft Maintenance	650	7.42
Supervision	536	1.11
TOTAL: 582214.03 (0.15) x (Aircraft Maintenance + Line Crew Hours)		

Figure 2-23

- (f) Ground Support Equipment Maintenance. Ground support equipment (GSE) is the equipment used during aircraft maintenance and aircraft handling such as special tools, racks, stands, tow tractors, auxiliary power units, etc. Staffing requirements for the maintenance of ground support equipment was derived from U.S. Navy work in this area,

which developed the standard number of work hours per year for each piece of equipment. The standard work hours to be used are based upon:

- (1) The Aeronautical Ground Support Equipment allowance for each type of aircraft listed in the Aircraft Material Stocking List for up to four aircraft of any one type, augmented by the normal allowance of mechanized support equipment shown in the table below, and by the normal allowance of check or work stands found at a unit operating that aircraft type. Standard equipment allowance (in addition to aircraft material stocking list) are as follows:

	HH-65A	HH-60J	HC-130	HU-25
Standard Equipment Allowances	8	10	10	10
Tow Tractors	2 Small	2 Med	2 Large	2 Med
Hydraulic Jenny	1	1	1	1
Hobart G.P.U.	1	1	1	1
Hanger Sweeper / Scrubber	1	1	1	1
Forklift	1 Utility	1 Utility	1 / C-130	1

Note: This allowance of ground support equipment generates the requirements for the following work hours for air stations operating up to four aircraft of any one type:

	HH-65A	HH-60J	HC-130	HU-25
Std GSE Maint. Work hours/ YR	468	590	768	650

Figure 2-24

- (2) Units, which operate, more than one aircraft type may add the values in Figure 2-24. determine their total work hours requirements. Units which operate more than four aircraft of any one type or which have more than the standard allowance of GSE may use the following to estimate their additional work-hour requirements:
 - (a) All non-motorized racks, stands, carts, jacks, tow bars, trucks and dollies 12 hours/year each.

- (b) Ramp sweepers, hangar deck scrubbers/sweepers, Herman Nelson heaters, portable floodlights, vacuum-blast units, air compressors, electric-driven hoists (including overhead), small tow tractors, mini-mules, engine wash carts, and mobile motor generator units 24 hours/year each.
- (c) Small forklifts, medium and large tow tractors, hydraulic jennys, ground air conditioning units, nitrogen service carts, oxygen service carts, ramp power systems, and hydraulic-driven hoists 36 hours/year each.
- (d) Engine test cells, C-130 forklift 120 hours/year each.
- (e) 2000 gallon refueler 170 hours/year each.
- (f) 5000 gallon refueler 220 hours/year each.

Note: Some of these items may be maintained by general service personnel in the public works department; if so, this workload should not be included for aviation enlisted personnel.

(g) Standard Staffing Based Upon Measurable Work.

This value may be calculated for units which do not have deployment requirements or unique ground support equipment allowances by totaling the work hours defined in Figure 2-23 (Annual Work Hours Per Aircraft times the number of aircraft of each type plus Work Hours Per Flight Hour times the number of flight hours for each aircraft type) and adding the work hours for ground support equipment shown in Figure 2-24. Staffing based upon measurable work is as follows:

	Number of Aircraft			
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
HH-65 (645 flt hours/year/acft)	8.9	18.0	26.9	35.7
HH-60 (700 flt hours/year/acft)	12.8	26.1	38.9	51.7
HC-130(800 flt hours/year/acft)	20.8	42.1	62.9	83.7
HU-25 (800 flt hours/year/acft)	12.4	25.2	37.6	50.0

*1 HC-130 400 Hour Augment: 1.5 pilots/11.0 aircrew

*1 HH-65 155 Hour Augment: 1 pilot/ 2 aircrew

Figure 2-25

Note: Using the figures from Figure 2-23, the incremental staffing increase needed to augment the flight hour output for any aircraft type may also be calculated. In all cases, units which can justify and document their measured work requirements which are greater than any of the described categories may use their actual requirements as a basis for requests for increases in staffing. They should also consider if their requirements in other areas are lower than the established standard.

(h) Adjustments to Aviation Enlisted Work Force due to TAD or deployments: The number of hours of work (1378) for aviation enlisted personnel (Figure 2-18) was calculated using a servicewide average of ten working days per year lost per person due to individual TAD (that's not associated with aircraft deployments). The actual experience of a particular unit may differ, so a means is provided to adjust staffing to absorb higher rates. An individual contributes 6.37 hours of work per day present at the unit (1378 hours available for work per year divided by 218 days available for work per year-- Figure 2-18), so each day of TAD by an individual takes a 6.37 work hour contribution away from the unit. Do not include TAD during deployments with aircraft in this figure; it is calculated below. Fractional increases in staffing due to individual TAD may be calculated as:

- (1) No staff increase until each person has taken an average of ten days TAD; once this has occurred, then $\text{Total Days TAD} \times 6.37 = \text{Enlisted Staff Increase}$ 1378.
- (2) Days deployed with an aircraft or days away from home station are treated differently. For example, consider the case of the HH-65A helicopter deployed aboard ship. One helicopter represents 6.4 hours of Line Crew Duty (LCD) per day and 2.2 hours of Aircraft Pre/ Through/Post Flight (APF) time per day of work while the absence of the shipboard deployment crew of three aviation enlisted personnel takes 19.1 hours of work (3×6.37) away from the unit. The deployed aircrew performs the Line Crew and Aircraft Pre/Through/Post Flight inspection work on the helicopter, so the net loss in work to the unit is 10.5 hours (19.1 minus 8.6) per day of shipboard deployment or days away from home station. The fractional increases in staffing due to aircraft deployments are calculated as per the example below:

$$\text{Example: } \frac{\text{Days Deployed} ((\text{DCS} \times 6.37) - (\text{LCD} + \text{APF}))}{1378}$$

Enlisted Staff Increase where:

- a. *DCS = Deployment Crew Size*
- b. *LCD = Line Crew Duty work/day*
- c. *APF = Aircraft Pre/Through/Post Flight work per day*
- d. *1378 = Work hours/individual/year*

- (3) Days deployed and/or days away from home station for an aircraft type may be obtained from the Abstract of Operations-Aircraft report. When performing calculations based upon historic data, at least a three-year average should be used for both the days TAD for individuals and days deployed for aircraft in order to eliminate short-term anomalies. These

adjustments are applied to the figures in Figure 2-25. After adjustments are applied, the resulting staffing is rounded up to the nearest whole billet.

- (i) Work Force Supervisors. This is an allowance of billets to perform the work of supervising the work of others. There are two components of this work: first-line supervisory work, which is a function of other workloads (this was calculated in Figure 2-23) and supervisory billets, provided for overall maintenance supervision.
- (1) The first-line supervision allowance, which is a function of other workloads, is a factor which was determined from various surveys. A standard allowance for supervision of 0.15 supervision work hours per hour of work performed in line crew duties and aircraft maintenance is provided. This allowance provides for such functions as line crew supervisors and shop supervisors as well as such functions as instructions, personnel paperwork such as special requests, individual counseling, assigning performance marks, and other such activities performed by first-line supervisors.
- (2) The billets in Figure 2-26 below are provided for overall supervision of aircraft maintenance and the personnel who perform it. In order to provide continuity, these billets are provided in addition to billets required for duty standing, deployments, and other work-loads. Enlisted work force supervisors are expressed in below in figure 2-26:

	<u>HH-65A</u> <u>Unit</u>	<u>HH-60J</u> <u>Unit</u>	<u>HC-130</u> <u>Unit</u>	<u>HU-25</u> <u>Unit</u>	Combined Afct Types
Leading Chief / CEA	1-E8	1-E8	1-E8	1-E8	1-E9
Maintenance Supervisor	1-E7	1-E7	1-E7	1-E7	2-E7

Figure 2-26

- (j) Aircraft Maintenance Support. This is an allowance of billets to perform work, which supports the maintenance of aircraft function. These figures were determined from air station work surveys covering these functions and from professional estimates. Aircraft maintenance support billets are described in figure 2-27 below:

	<u>HH-65A</u> <u>Unit</u>	<u>HH-60J</u> <u>Unit</u>	<u>HC-130</u> <u>Unit</u>	<u>HU-25</u> <u>Unit</u>	Combined Afct Types
Quality Assurance Supervisor	1-E6	1-E6	1-E6	1-E6	1-E7
ACMS Office	1-PO	1-PO	1-PO	1-PO	2-PO
Aviation Supplies	0.5-PO	1-PO	1-PO	1-PO	2-PO
Tool Control / Ready Issue	0.5-PO	1-PO	1-PO	1-PO	2-PO

Figure 2-27

- (k) Rating Distributions. The distribution of the aviation-enlisted billets is derived from the analysis of the distribution of work hours reported through ACMS reports. Because

each aircraft type is different, each has the need for a different distribution of aviation enlisted ratings in order to provide the proper work force with the proper mix of skills. Note, however, that this distribution may be altered for the unique circumstances of the unit. The standard distribution of AVT/AMT Ratings is shown in Figure 2-28:

Rating	<u>HH-65A</u>	<u>HH-60J</u>	<u>HC-130</u>	<u>HU-25</u>
AMT	70%	75%	71%	66%
AVT	30%	25%	29%	34%

Rating	<u>HH-65A</u>	<u>HH-60J</u>	<u>HC-130</u>	<u>HU-25</u>
AST	AST BO requirement yields 7 AST's as a minimum (other unit requirements are articulated through the Rescue Swimmer Program Manager in G-OCA)			

Figure 2-28

- (1) Unique Requirements. Units having unique requirements due to operational circumstances or operating environments or because their work force performs "non-standard" functions such as prime units, standardization units or units providing test cell support should quantify the work hours required by these differences and make their requirements known through their chain of command to G-OCA.
- (2) Non-Aviation Enlisted Personnel. Requirements for non-aviation enlisted billets at air stations fall under respective sections of this manual.
- (3) Summary of Measured Work Results. For the purpose of budgeting and programming issues, when a personnel adjustment is required, the below table may be used to determine the measured work billets required for adding or deleting a single aircraft from an existing unit. As always, unique circumstances and special operational requirements of the unit may require adjustments to these figures.

<u>AIRCRAFT TYPE</u>	<u>PILOTS / AIRCREWS</u>
HH-65	4/10
HH-60	5/15
HC-130	3/22
HU-25	4/13

Figure 2-29

Page 2-60 through Page 2-65 intentionally left blank for future use.

2.G. Stations.

1. Definitions. A “Station” is a multi-mission Coast Guard Shore Facility designed to boats in support of designated missions, Stations are provided with boat and personnel allowances, facilities for vessel moorings and maintenance, stations administration, berthing and messing. In order to accomplish assigned missions stations provide unit level training and equipment maintenance. Stations are responsible for their own internal supervision but receive support and services from a district office, base, support center, or other host command.
2. Introduction. Station staffing standards provide a framework for determining personnel allowance appropriate to multi-mission tasking while conserving Coast Guard resources. The basic “ground rules” for the standards are indicated below. The standards are based on specific concepts of station operations and activities; however, nothing should be construed to constrain the operational commander from employing his or her resources as he or she deems appropriate to meet station responsibilities. Factors that might alter the basic staffing, such as extreme climate, location, availability of support facilities, etc., must be fully justified and will be evaluated individually.
 - a. Facility Locations. Stations are facilities of the Search and Rescue (SAR) system. Our goal is to locate stations such that assistance can be rendered within two hours of Coast Guard notification.
 - b. Boat Requirements. Boat type requirements are based on operational and environmental demands in the assigned area of responsibility. Multiple platforms may be required for (1) scheduled and unscheduled missions and, (2) to ensure effective SAR mission performance. Inventories will not exceed what can be operationally justified.
 - c. Communications. Stations are a fundamental part of the SAR alerting network, maintaining a 24 hour telephone watch (not necessarily live) and limited VHF-FM channel 16 guard. Generally, stations are not required to maintain a 24-hour radio watch. In order to